

PRECISION POTENTIOMETERS

HELIPOT MODEL "A", 10 TURN

Bakelite body: 1-13/16" diameter x 2-1/8" long maximum. Shaft: 1/4" diameter x 1/2" long. 3/8" threaded bushing. 5 watt. Standard resistance tolerance $\pm 3\%$, unless otherwise noted.



OHMS	LINEARITY	MFR. & NO.	PRICE
25	.5	Helipot A	\$5.50
25	.5	Helipot A	4.50*
50	.1	Helipot A	6.50
50	.5	Helipot A	5.50
100	.25	Helipot A	6.00
100	.25	Helipot A	5.00*
200	.25	Helipot A	6.00
200	.25	Helipot A	5.00
200	.5	Helipot A	4.50*
500	.1	Helipot A	5.50*
500	.25	Helipot A	6.00
500	.25	Helipot A	5.00*
500	.5	Helipot A	4.50*
1K	.02	Helipot 7709	7.00
1K	.1	Borg. 205	5.50*
1K	.1	Borg. 901B	7.00
1K	.5	Helipot A	4.50*
2K	.025	Spectrol 800 ¹	5.50
2K	.05	Helipot A	6.00*
2K	.25	Helipot A	5.00*
2K	.5	Helipot A	4.50*
2.2K	.05	Helipot SAN2760 ¹	6.00
2.375K	.05	Spectrol 800 ¹	6.00
4.75K	.1	Helipot SA807B	5.00

OHMS	LINEARITY	MFR. & NO.	PRICE
4.75K	.1	Spectrol 800	5.00
5K	.05	Borg. 901B	7.00
5K	.05	Borg. 205	7.00
5K	.05	Helipot SA4248	7.00
5K	.1	Helipot A	5.50*
5K	.1	Borg. 205	5.50*
5K	.1	Spectrol 800	5.50*
5K	.25	Helipot A	6.00
5K	.25	Helipot A	5.00*
5K	.5	Helipot A	5.50
5K	.5	Helipot A	4.50*
7.5K	.25	Helipot A	6.00
10K	.05	Helipot A	7.00
10K	.25	Helipot A	5.00*
10K	.25	Spectrol 860	6.00
20K	.05	Spectrol 810	7.00
20K	.1	Helipot A	6.50
20K	.1	Borg. 205	6.50
20K	.1	Borg. 205	5.50*
20K	.25	Helipot A	5.00*
20K	.25	Spectrol 800	6.00
20K	.5	Helipot A	4.50*
20K	.5	Borg. 205	5.50
30K	.05	Helipot A	7.00
30K	.1	Helipot A	6.50
30K	.1	Helipot A	5.50*
30K	.25	Helipot A	6.00
30K	.5	Helipot A	4.50*
50K	.5	Helipot A	6.00
50K	.1	Helipot A	5.00*
50K	.25	Helipot A	6.00
50K	.25	Helipot A	5.00
100K			
200K	.5	Helipot A	5.50
300K	.5	Helipot A	5.50
450K	.1	Helipot A	5.50*

1 - servo mount
*RFE

OHMS	LINEARITY	MFG.	NO.	PRICE
1	.5	Helipot.	C	4.00
5	.5	Helipot	SC967	4.00
5	.5	Duncan	3605	4.00
10K	.1	Helipot	C	4.50
10K	.5	Helipot	C	4.00
10KCT	.5	Helipot	C	4.00
15K	.5	Helipot	C	4.00*
20K	.1	Helipot	C	3.00
20K	.5	Helipot	C	4.50
25K	.5	Helipot	SC474B	4.00*
30K	.1	Helipot	C	3.00
30K	.5	Helipot	C	4.50
50K	.5	Helipot	SC230	4.00

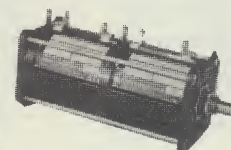
*RFE

HELIPOT MODEL "C" 3 TURN



GANGED MODEL A

OHMS	LINEARITY	PRICE
100/30K/10K	.5	\$5.50
500/500	.25	6.00
5K/20K	.1	6.50
10/30K	.5	5.50



60 CYCLE VOLTAGE REGULATORS

1KVA

Perkin: MLR 1000
Output: 110-120V adj.
Input: 95-135V 60 cy.

\$150⁰⁰



6KVA

GENERAL RADIO 1570 AL

Output: 115V @ 50 amp. $\pm .25\%$
Input: 90-110V 60 cy.

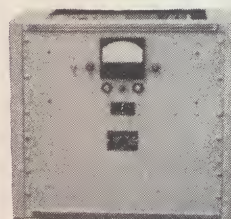
\$225⁰⁰



7.5 KVA

STABILINE EM 64207 EM 64207
Output: 220-240V adj. $\pm 1\%$
Input: 195-240V 50/60 cy.

\$275⁰⁰



25 KVA

STABILINE EMT 10146

Output: 120V, $\pm 1\%$
Input: 102-138V 50, 60 cy.
A.C.: 1Ø, 3 wire

May be used to regulate two independent loads up to 12 KVA (104 amp.) or in a three Ø, four wire wye connection to provide 120 volts regulated from each line to neutral for 25 KVA loads.



\$750⁰⁰

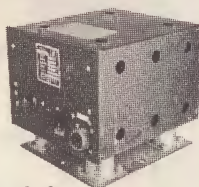
400 CYCLE REGULATORS

250VA

SORENSEN D250 SAN

Input: 95-130 V 400 cy. 3.6 Amps.
Output: 115 V 250 VA R.F.N.E.

\$250⁰⁰



150 VA

AMERICAN ELECTRONICS #8108L

Input: 115 Volts, 400 cycle, $\pm 10\%$
Output: 110/120 Volts, 400 cycle, 150 VA $\pm 1\%$ Regulation. Requires exterpotentiometer for voltage adjustment. Potentiometer and Schematic supplied with unit. Dimensions: 6.75" x 5.8" x 5".

\$150⁰⁰



CONSTANT VOLTAGE TRANSFORMERS

500 WATT

RAYTHEON VR6115

Input: 95-130V, 60 cy.
Output: 115V, 4.35 amps. 500 watts
PF= 100%

\$39⁵⁰

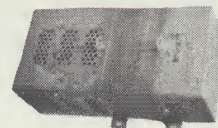


3KVA

SOLA 23-26-230

Output: 118-236V @ 25.4-12.7 amp.
Input: 190/260-380/520 V 60 cy.

\$150⁰⁰

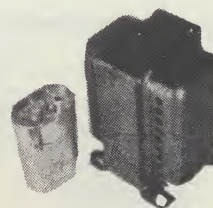


FILAMENT TRANSFORMER

SOLA 20-04-065

Input: 95-130 / 190-260 VAC
Regulation: $\pm 1\%$
Output: 6.3V @ 10 Amps.

\$12⁵⁰



FILAMENT TRANSFORMER

SOLA #22-547

Primary: 95 to 130V 60 cy.
Rated: VA 216
Secondary: 6V @ 3.6 Amp.

\$6⁵⁰



400 CYCLE

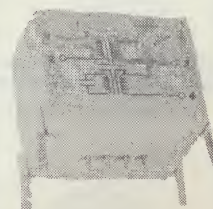
FILAMENT TRANSFORMER

DYNA POWER ELECT. CORP.

3M46 MAG. AMP.

Type: 114-126V, 400 cy.
Primary: 6.25-6.45 @ 1 to 3 amps.
Secondary: 5%
Regulation: -40 + 160° F
Temperature Range:

\$6⁹⁵



STEP DOWN TRANSFORMER

6 KVA

G. E. 9T21A4002

Primary: 480V 3Ø Wye
Secondary: 208V/120V

\$125⁰⁰



PRECISION POTENTIOMETERS (Cont.)

MINIATURE 10 TURN POTENTIOMETERS



OHMS	LIN.	MTG.	MFR.	NO.	PRICE
1K	.1	Bushing	Helipot	7221	\$6.50
1K	.5	Bushing	Helipot	AJ/SAJ	5.50
1K	.5	Bushing	Spectrol	500-486	5.50
1K	.25	Bushing	Spectrol	500	6.00
2K	.5	Bushing	Helipot	AJSS	5.50
5K	.1	Bushing	Helipot	AJ	6.50
5K	.5	Bushing	Helipot	AJ/7211/SAJ	5.50
5K*	.25	Bushing	Spectrol	500-9505	5.00
5K*	.05	Servo	Spectrol	500-257	5.50
7.5K	.1	Bushing	Helipot	7221	6.00

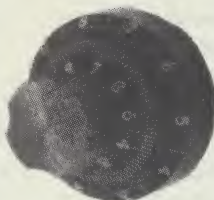
OHMS	LIN.	MTG.	MFR.	NO.	PRICE
9.860K	.1	Servo	Helipot	SAJ	\$5.00
10K	.1	Servo	Helipot	7203	6.50
10K	.1	Bushing	Spectrol	500	6.50
20K	.1	Bushing	Helipot	AJ	6.50
20K	.5	Bushing	Helipot	7221	5.50
20KCT	.3	Servo	Spectrol	500	6.00
30K	.1	Bushing	Helipot	AJ	6.50
50K	.1	Servo	Helipot	AJSP	6.50
100K	.5	Servo	Helipot	AJSP	5.50
100K	.1	Servo	Spectrol	500/533	6.50
100K	.1	Servo	Fairchild	920	6.50
100K	.25	Bushing	Fairchild	909/2029	6.00
25K/25K	.05	Servo	Spectrol	500	6.50
100K/1K	.25	Bushing	Spectrol	570	6.00
500K	.5	Servo	Helipot	AJ/SAJ	5.50

*RFE

MULTI TURN DIALS

MINIATURE PRECISION DIAL

1" diameter precision dial for use with up to ten turn pots, having a shaft diameter of 1/8" and 1/4" bushing. Finger-tip pressure locking device. An angular surface provides greater area to provide maximum numerical size. Numbers are rearranged to a primary and secondary scale presentation. Scale readable to 999 divisions, zero backlash. Life tested to 1/4 million cycles. Dial mounts rigidly on panel, and knob attaches to shaft. Black finish, white numerals. Equivalent to IRC RD422.



\$4²⁵

HELIPOT RB DUODIAL

For use with up to 15 turn pots, having a shaft 1/4" in diameter by at least 1/2" long, with standard mounting nut, 3/8" x 32" thread. Incorporates a locking device. Scale readable 0-1500 divisions. May be used with 10 or 15 turn pots, giving 1000 divisions on 10 turn, and 1500 divisions on 15 turn controls. Brush chrome finish, black knob.



\$4⁵⁰

HELIPOT RBB DUODIAL

Specification same as for RB Duodial, designed for use with Model B, 15 turn potentiometer. Black matte finish and white filled numerals.

\$4⁹⁵

BORG 1326

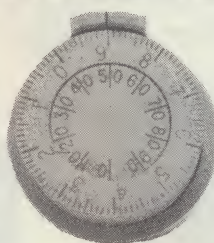
For use with up to 10 turn potentiometers having a shaft of 1/4" inch dia. by at least 1/2" long with standard mounting nut. Incorporates a finger tip brake which retains shaft position until reset. Indexed accuracy is 1/1000. This is suitable to a pot. of .1% lin. Dull black cover, satin chrome dials. 1-3/4" max. dia.



\$3⁷⁵

10 TURN CONCENTRIC SCALE DIAL

For use with up to 10 turn potentiometers having a shaft of 1/4" dia. x at least 1/2" long. With standard mounted backing. Numbers are rearranged to a primary and secondary scale presentation. Scale readable to 999 divisions.



\$3⁵⁰

BORG 1308/1310 10 TURN DIGITAL DIAL

Microdial less brake. For use with 10 turn or less potentiometers. Provides 1000 points (0-999) accurate to one part in 1000. Counter type. Window is 7/8" wide x 1/4" high. Numerals are 3/16" high. For 1/4" diameter x 1/2" long shaft. Dull black finish with brush-chrome die-cast knob. Overall size: 1 3/4" diameter x 1-5/8" high.



\$8⁹⁵

BORG 1309 10 TURN DIGITAL DIAL WITH BRAKE

Same as above with brake.

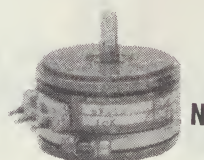
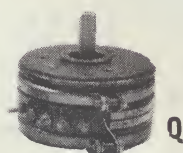
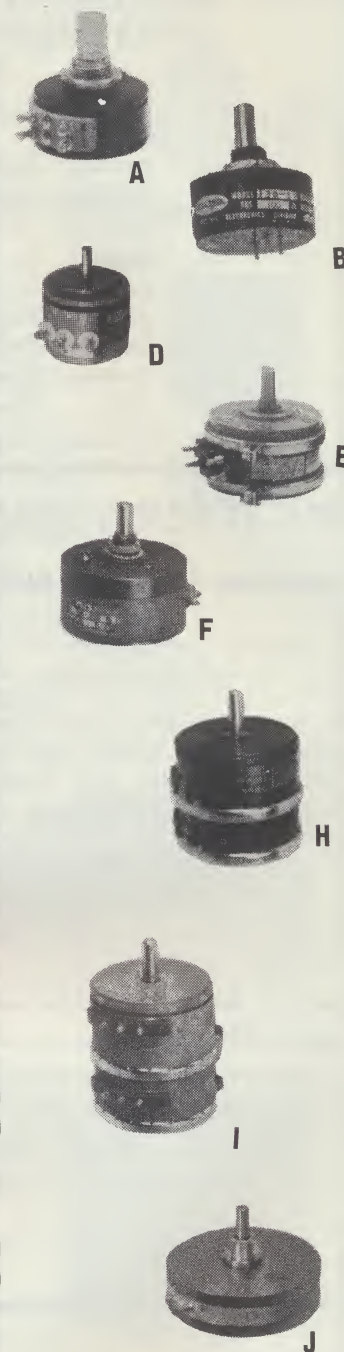
\$10.95

PRECISION POTENTIOMERS (Cont.)

SINGLE TURN CONTINUOUS ROTATION

OHMS	LIN.	WATTS	MTG.	DIA.	FIG.	MFR. & PART NO.	PRICE
10	.5	2	Bushing	1-5/16	B	Helipot G	\$ 5.00
50	.2	2.75	Bushing	1.312	A	Spectrol 100	6.00
100	.3	2.75	Bushing	1.312	B	Spectrol 130-12	4.50
100	.5	2	Bushing	1-5/16	B	Helipot G	5.00
100	.5	2.75	Bushing	1.312	B	Spectrol 130-12	4.50
200		3	Bushing	1-1/8	A	Acepot AP11-C	3.00
500*	.3	2.75	Bushing	1-3/16	A	Spectrol 100	3.00
500	.5	2	Bushing	1-5/16	B	Helipot G	5.00
500	.5		Bushing	3	J	Helipot 5701	5.50
500	.5		Bushing	1-1/4	B	Spectrol 130-54	3.50
1K	.5		Bushing	1-1/4	B	Helipot 5301	5.00
1K	.5	2	Bushing	1-5/16	B	Helipot G	5.00
1K	.25		Servo	2	E	Helipot SJ1847	3.50
2K		6	Servo	1-3/16	A	Waters AP 1-1/16	2.50
2K	.5	2	Servo	1-5/16	B	Helipot G	5.00
2.5K *	.3	2.75	Servo	1.312	A	Spectrol 100	6.00
2.5K *	.5	1.75	Servo	.875	D	Spectrol 700	12.50
5K	.5		Bushing		B	Cole 1032	2.50
5K *	.5		Bushing	2	F	Helipot SJ343	4.50
10K	.2		Bushing	3	J	Helipot SL142	5.50
10K	.5		Bushing	3	J	DeJur HP300	5.50
10K	.5	4.5	Servo	1-3/4	O	Spectrol 200	10.00
10K	.5		Servo	1-3/4	N	Helipot SV213	3.50
10K	.25		Bushing	1.312	B	Spectrol 130-241	4.50
10K	.25		Bushing	1-5/16	B	Helipot SG234B	5.00
10K	.25		Bushing		F	Helipot SJ	3.50
20K	.1		Servo	3	L	Anton K300BV	5.50
20K	.3	5	Bushing	2	B	Spectrol 300	9.50
20K	.5		Servo			TIC ST11	2.50
25K		5	Bushing	1-1/16	A	Waters RTS 7/8	2.50
50K	2.	5	Bushing	1-1/16	A	Waters RT 7/8	2.50
50K		5	Bushing	1-1/16	A	Waters RTS 7/8	2.50
60K	2%		Servo	1-5/8	Q	Fairchild 746	3.50
100K		6	Bushing	1-7/32	A	Waters AP 1-1/8	2.50
25/25K			Bushing	1-7/32	A	Waters AP 1-1/8	2.50
200/10K/							
10K	25/.15/.15		Servo	2	M	Helipot SJ500	5.50
200/10K							
10K	25/.15/.15		Servo	2	M	TIC ST 20-52	5.50
812/6K			Servo	2	I	Acepot AP20C	5.50
946/10.9K		6	Servo	3	H	TIC ST30-S114A	5.50
2K/100K	.2/.5		Bushing	3	M	Helipot 5719-497-0	5.50

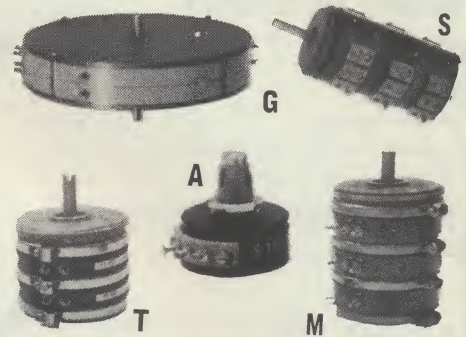
*RFE



PRECISION POTENTIOMERS (Cont.)

SINGLE TURN CONTINUOUS ROTATION (Cont.)

OHMS	LIN.	MTG.	DIA.	FIG.	MFR. & PART NO.	PRICE
5K/5K	.3%	Servo	1-1/16	G	Giannini 1062S130	\$4.50
5K/5K	.25%	Servo			Markite 8071	4.50
11.4K/11.4K		Servo	5	K	DeJur HP502	5.50
12K/10K/10K		Servo	7/8	S	Fairchild 751	3.50
17.5K/17.5K		Servo	2	T	Fairchild 747F	3.50
25K/25K		Bushing	1-7/32	A	Waters AP1-1/8	2.50
100K/5K	15/5	Bushing			Helipot 5611-98-0	3.50
100K/100K/100K		Servo	2	M	Helipot SJ337A	4.50



MULTI TURN POTENTIOMERS

TURNS	OHMS	LIN.	MTG	Fig.	Mfg.	NO.	PRICE
3	3K	.5	Servo	5	Electromath	18-100-3	\$4.50
3	3K/10K		Servo	6	Fairchild	934-6001	4.50
5	1K	.1	Bushing	1	Circuit Instr.	SM505	3.50
10	1.5K	.1	Servo	3	Giannini	85172K10-15C	6.00
10	5K	.02	Servo	2	Analog Control	1810*	5.50
10	5K	.5	Bushing	4	IRC	R14	5.00
10	20K	.1	Bushing	4	Dayton Multipot	420-001	5.00
10	20K	.5	Bushing	1	IRC	7500	4.50
10	20K	.25	Bushing	1	IRC	HD150	4.50
10	25K	.25	Bushing	1	VanDyck Instr.	1141 & 83	4.50
10	500	.2	Bushing	7	Bourns	3500S-1-SO1	5.50
15	1K	.05	Servo	2	Helipot	SB-179G	8.50
15	10KCT	.5	Servo	2	Helipot	BSP20	15.00
15	10K	.025	Bushing	8	Helipot	SB86925	15.00
20	1K	.05	Servo	3	Giannini	85172A-20-100	20.00
40	20K	.05	Servo	3	Giannini	85173A-40-200M	35.00



KELVIN VARLEY VOLTAGE DIVIDER

ELECTRO SCIENTIFIC INDUSTRIES
DP211/X451-2

Resistance: 10K ohms.
Linearity: $\pm .01\%$
Resolution: .003%
Input Power Rating: 5W
No. of Decades: 2 Plus 100 Div. Pot.

\$49⁵⁰



KELVIN VARLEY VOLTAGE DIVIDER

ELECTRO SCIENTIFIC INDUSTRIES DPX 26A

Resistance: 3K OHMS
Linearity: $\pm .05\%$
Resolution: $\pm .01\%$
Power Rating: 1 Watt Max.
No. Of Decades: 3 Plus 100 Div. Pot.

\$59⁵⁰



DECADE RESISTORS (Rheostat)

DEKASTAT DS265

2 Decades + 105 div. rheostat .5 watt Power Rating.

Total Resistance	Small Step (Dial Div.)	Price
1.2 K	100 m ohm	\$34.50
12K	1 ohm	39.50
1.2 Meg.	100 ohm	39.50



LOAD RESISTOR

100 Watts
56 Ohm. 1%
Dale RH 250



\$6⁵⁰

LINEAR POTENTIOMETERS

BOURNS 118-91-20001B

Resistance: 20K ohms
Linearity: $\pm .1\%$
Resolution: .001
Power Rating: 2.5 Watts
Linear Travel: 1.328"
Aluminum Body Dim.: $\frac{1}{2}$ " x 5/8" x 3.5"



\$9⁹⁵

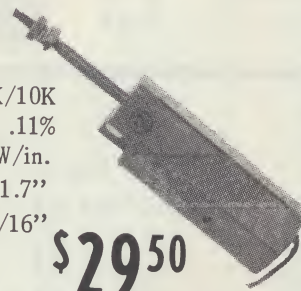
EDCLIFF 103504 and 8529139

Specifications same as above.

\$7⁹⁵

BOURNS 156

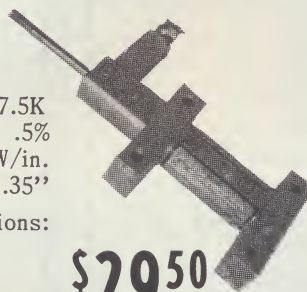
Resistance: Dual: 10K/10K
Linearity: $\pm .11\%$
Power rating: 1W/in.
Linear Travel: 1.7"
Stainless Steel Case. Dim.: 3" x 11/16" x 1-1/16.



\$29⁵⁰

BOURNS 15717

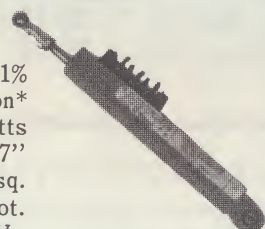
Resistance: 7.5K
Linearity: .5%
Power Rating: 1W/in.
Linear Travel: 1.35"
Stainless Steel Case. Body Dimensions: 4 1/4" long x 3/4" square.



\$29⁵⁰

FAIRCHILD 215-954711

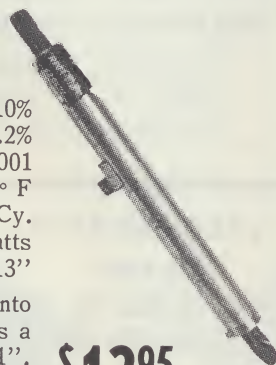
Resistance: 5K ohms $\pm .1\%$
Linearity: .4% function*
Power Rating: 1.75 Watts
Linear Travel: 2.37"
Dimensions: 7" long x 3/4" sq.
W. 28V across pot.
*from 0-.92" Output 0-8V
from .92"-1.77" Output 8V-22V
from 1.77"-2.37" Output 22V-28V
with 28V Input



\$12⁹⁵

HUMPHREY RP040101-1

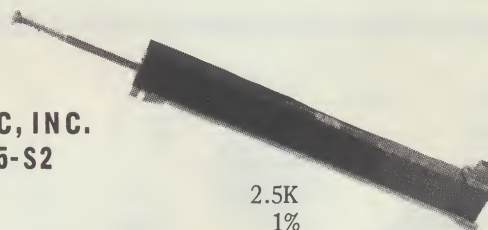
Resistance: 30K ohms $\pm 10\%$
Linearity: $\pm .2\%$
Resolution: .001
Operating Temp. Range: $-65^{\circ} + 275^{\circ}$ F
Service Life: 1,000,000 Cy.
Power Rating: 2 Watts
Linear Travel: 4.13"
Body has calibrated scale divided into increments of 1/20 of 1". Slider has a vernier scale permitting readings to .01".
Stainless steel body 5/8" Dia. x 7-5/8" long.



\$12⁹⁵

SERVONIC, INC. GRS-10-25-S2

Resistance: 2.5K
Linearity: 1%
Linear Travel: 10"
Body Dim.: 12-1/2" long x 1" wide x 1-3/8" high



\$59⁵⁰

TECH. INST. CORP. RVTS

Resistance: 10K $\pm 5\%$
Linear Travel: 2 1/4" (rotation continued)
Power Rating: 1 Watt
Aluminum Body Dimensions: 1 1/4" x 1 1/4" x 3 3/4"



\$12⁹⁵

TOPP L.C. 750

Resistance: 150 K.W.W. CT topped
Linear Travel: 7 1/4"
Dimensions: 3/4" diameter x 10 1/4" long



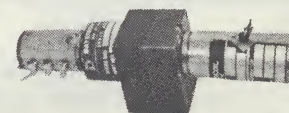
\$15⁹⁵

SERVO DRIVEN POTENTIOMETER

SERVO ASSEMBLY

DAYSTROM U-283

Type 9 motor generator (Daystrom #A203424-18-4-3-6) drives a (10 turn, 50K, .5% Linear Helipot type AJ) precision potentiometer through a gear reduction of 4000 to 1. Slip clutch and internal stops are included for pot protection.

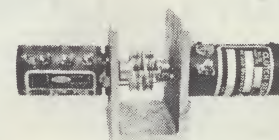


RFE \$56⁵⁰

SERVO DRIVEN POTENTIOMETER

SERVO ASSEMBLY

Type 10 clutch gear head motor (Servomechanisms #10C2B67C4-7) direct coupled to a (19 turn, 20K, .3% Linear Spectrol type 500) precision potentiometer.



RFE \$27⁵⁰

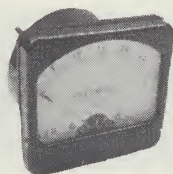
METERS

HICKOCK S48

4" DC MILLIAMMETER

Range: 0-3 ma.
Accuracy: $\pm 1\frac{1}{2}\%$
Scale: 3.75" long

\$5⁹⁵



ROLLER SMITH TYPE DD

2" DC MILLIAMMETER

Range: 0-2 ma.
Resistance: 75 ohm.
Scale face: 0-20 mag. cur.

\$2⁵⁰

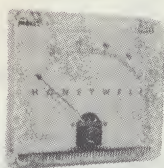


SIMPSON

4½" DC MICROAMMETER

Range: 0-500 ua.
Scale: 50-100

\$4⁵⁰



WESTON 1751

4½" DC MILLIAMMETER

Range: 0-1 ma.
Accuracy: $\pm 2\%$
Scale: 4" long

\$5⁵⁰

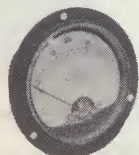


MARION HS3X

3" VOLTMETER

Range: 0-30VDC

\$5⁵⁰



WESTON 1521 RUGGEDIZED METER

2½" DC VOLTMETER

Range: 20-40VDC
Sensitivity: 1000 ohms/volt
Rated Accuracy: $\pm 2\%$ of full scale
Scale: 1.80"
Scale Divisions: 40

\$7⁵⁰

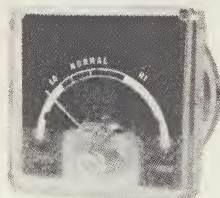


HOYT 649

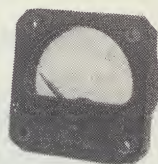
2½" DC MICROAMMETER

Range: 0-200 microamps.
Rated Accuracy: $\pm 2\%$ of full scale
Scale Length: 2.5"

\$4⁹⁵



1½" MINIATURE METERS



0-1 ma. DC
Accuracy:
Scale:
Scale Face:
Weston 1011

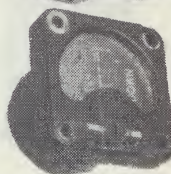
$\pm 3\%$
1.3" long
0-1 output voltage

\$4⁵⁰



0-50 MILLIVOLTS DC
Scale Face: -1 to +1.25 load
Requires 50 millivolts shunt (not supplied)
DeJur Type J1

\$4⁵⁰



0-500 MILLIVOLTS DC
Scale Face: -1 to +1.25 load
Requires 500 millivolts shunt (not supplied)
Westinghouse Type G1

\$4⁵⁰

BECKMAN EXPANDED SCALE METERS

24-30VDC
Center Voltage: 27V
Accuracy: $\pm 0.6\%$ of centerscale
No. 027-3104-0

110-120 VAC
Center Voltage: 115V
Accuracy: $\pm 0.3\%$ of centerscale
No. 026-3107-1

380-420 Cps.
Center Frequency: 400 cps.
Frequency Deviation: 20 cycle span
Accuracy: $\pm 0.25\%$ of center scale
 $\pm 0.5\%$ of end scale
No. 051-3132-0



\$19⁵⁰

TRANSISTOR VOLTMETER

TRIOLAB 303-1667

Range: 0-10 mv. AC.
0-30 mv. AC.
Meter face: 2"

\$39⁵⁰



400 CYCLE FREQUENCY METER

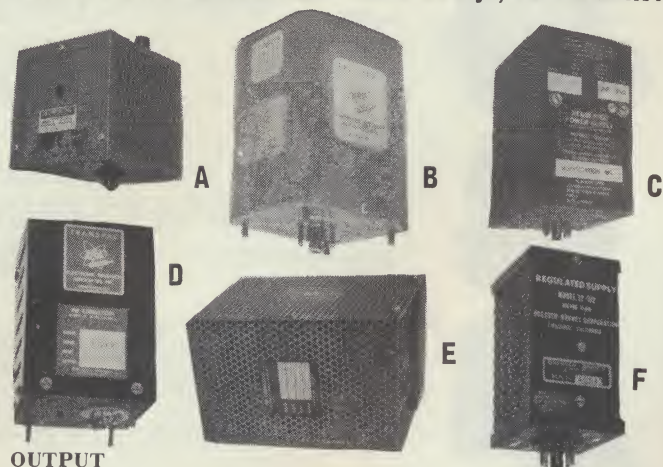
Range 380-420 cy. with an input of 100-130 VAC. 8 vibrating reeds provide 5 cy. increments within freq. range. Accuracy $\pm 3\%$.

\$19⁵⁰



POWER SUPPLIES

SOLID STATE MODULES 115V 60 Cy., 10 PRIMARY

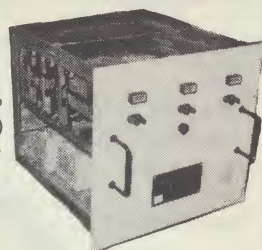


OUTPUT Volts Current (DC) (Amps.)		Reg.	Term.	Mfr. & No.	Fig.	Price
1	2	.03%	P	Deltron PI1-2	A	\$49.50
2-3	3 ma.	.05	P	E.R.A. TR3/3HS	B	30.00
3	2	.03	P	Deltron PI	A	49.50
3.5	2	.03	P	Deltron PI3.5-2	A	49.50
6	2	.03	P	Deltron PI6-2	A	49.50
8	1.5	.03	P	Deltron PI8-1.5	A	49.50
11-13	2	.05	S	E.R.A. TR12R	E	49.50
12-20	200 ma.	.5	P	E.R.A. TR10D	B	39.50
12	1	.03	P	Deltron PI12-1	A	49.50
24	.5	.05	S	E.R.A. TR24P5R	D	59.50
26	.35	.5 mv.	S	¹ D. B. 20-26	C	49.50
100	.1	.03	P	Deltron PI100-.1	A	49.50
150	.015		P	¹ D.B. 12-102GV	F	39.50

¹ D.B.: Dressen Barnes

28VDC POWER SUPPLIES

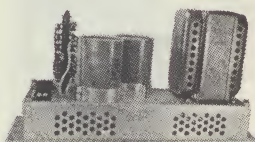
Input Power: 120/208V rms \pm 10%
60 \pm 5 cps. and 36VDC (optional)
Will automatically revert to a battery
input in case of an AC power failure,
without any interruption of regulated
output.



Line Regulation: 29 mv for \pm 10% changes
Load Regulation: 50 mv peak to peak
Stability: 8 hrs., 20 mv max. (1 hr. warmup)
Line Transient Response: 50 mv excursion for 20%
line excursion

	Transval 5170A	Leach 4384A
Output Current (Amps. DC):		
Continuous	10	30
Intermittent	13	40
Max. Overload Current: (Amps. DC)	13 \pm 1.3	40 \pm 4
	\$150.00	\$225.00

SOLA POWER SUPPLIES

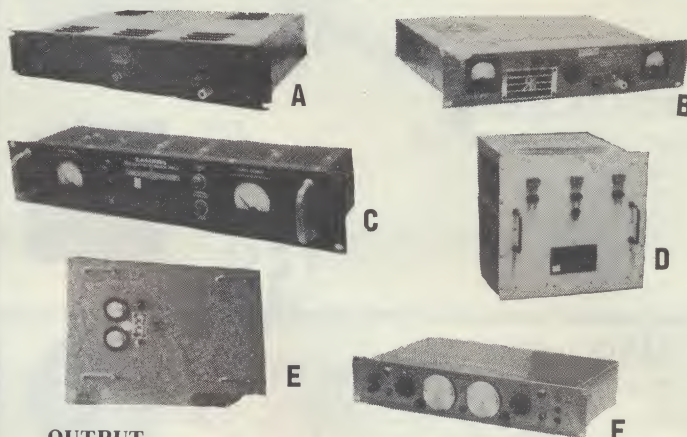


The combination of a constant voltage transformer, semi-conductor rectifier and high capacitance filter yields a DC Power Supply which is compact in size, light in weight and has these important advantages: (a) output regulation of 1% or less with 10% line voltage variations, (b) ripple 1V (RMS), input 100-130 volts, 60 cy.

Output Volt (VDC)	Current Range (Amps.)	Part Number	Price
12	2	28858	\$55.00
24	6	28156	70.00
48	4	28120/28259*	55.00
70	2	28353	55.00
150	2	28106	70.00
200	1	28193	55.00
250	1	28192 or equiv.	55.00
250	5	281146	125.00

*Input: 115/208V, 60 cy.

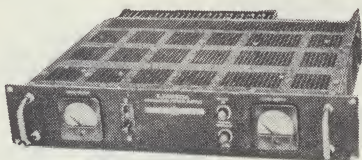
SOLID STATE LOW VOLTAGE



OUTPUT Volts Current (DC) (Amps.)		Reg.	Metered	Mfr. & No.	Fig.	Price
2.5-4.5	4	.1%	No	Deltron LH84	A	\$ 90.00
7-12	30-105		Yes	Christie MH12-105KS4	E	350.00
0-35	20	.1	Yes	Lambda LA200-03BM	C	325.00
36/36	5/60		No	Amer. Elect. 8322B	D	300.00
24-32	100	.5	Yes	Perkin M675-1 ¹	E	450.00
0-100	100		Yes	E.M.C. 212A	F	100.00
8.5-10.5	4	.1%	No	Deltron LH244	A	90.00
.5-36	2	10 mv.	Yes	Dressen Barnes 62-124	B	175.00
0-32	2	.15%	Yes	Lambda LT2095M	C	150.00
0-36	12		Yes	E.R.A. TR36-12M		200.00
1 - 220V						
2 - 440V 3Ø 60 cy. Primary						

POWER SUPPLIES (cont.)

115V 60 Cy., PRIMARY LAMBDA POWER SUPPLIES B+ SUPPLIES



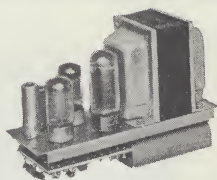
Mod. LAMBDA	Volt. Range (VDC)	Range (MA)	Reg.*	6.3 VAC Output (Amps.)	Meters	Price
28	200-325	100	D	3 amps	None	\$ 40.00
28M	200-325	100	D	3 amps	3-1/2	50.00
33M	100-200	300	D	2@5amps	3-1/2"	95.00
62M	245-305	600	C	20A	3-1/2	135.00
64M	100-200	600	C	20amps	3-1/2	125.00
C280	0-200	200	C	10A	None	120.00
C281	125-325	200	C	10A	None	95.00
C281M	125-325	200	C	10A	3-1/2"	110.00
C282M	325-525	200	C	10A	3-1/2	125.00
C482	325-525	400	C	15A	None	150.00
C880	0-200	800	C	20A	None	200.00
C1580M	0-200	1500	C	2@15amps	3-1/2	325.00
C1580	125-325	1500	C	30A	None	325.00

LOW VOLTAGE

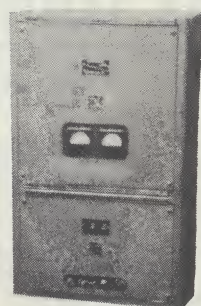
Mod. LAMBDA	Volt. Range (VDC)	Range (MA)	Reg.*	Meters	Price
LT2095M	0-32VDC	0-2 amps	.15%	Yes	\$150.00
LA200M	0-35VDC	0-20amps	D	Yes	

Reg.*	Line volt.	load
C	0.15%	.25%
D	1%	.1%

TUBE TYPE



A



B

OUTPUT							
Volts (DC)	Current (Amps.)	Reg.	*	Mfr. & No.	Fig.	Price	
80-260	.150	375 mv.		D. B. 22-110	A	\$ 29.50	
25.2-30.8	30	.2%		Sorenson E28-30	B	300.00	

DUAL MAGNETIC REGULATED STABLVOLT

No tubes are incorporated in this power supply, which features a balanced double-ended output extremely well regulated against unbalance between the two channels. High temperature silicon rectifiers are used for filtering.

Mfr.: Magnetic Research Corp. MRP-15D-0.2
 Input Voltage: 105/125V, 400 cy.
 Output Voltage Channel 1: +15VDC
 Output Voltage Channel 2: -15VDC
 Output Current: 0-220 ma.
 Regulation Line Volt: $\pm .2\%$
 Load: $\pm .1\%$
 Frequency Regulation Line: $\pm .3\%$
 Regulation Diff: $\pm .25\%$
 Ripple: $\pm .1\%$
 Response Time: .2 sec/5% output
 Dim: 4-5/16" x 3-11/16" x 4-1/2"

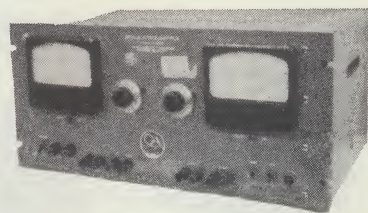


\$59⁵⁰

OUTPUT									
Volts (DC)	Ma. (Max.)	Reg.	Bias Volt-ma	Meters	6.3VAC Output Amps.	Mfr. & No.	Price		
0-300	300	.02	150-5	Yes	10	Dressen Barnes D3-300	\$250.00		
0-150	150								
0-300	500	.02	Yes	Yes	10	Dressen Barnes D3-500	300.00		
0-300	500								
0-300	150	.033		Yes	6	Dressen Barnes D3-150	250.00		
0-300	150								
0-500	200	.033	Yes	Yes	4	Dressen Barnes D5-200B	250.00		
0-500	200								
0-100	100	.02		None		Dressen Barnes D1-100	250.00		
0-100	100								
0-1000	500			Yes		Kepco 1350	350.00		
150	50			None	10	Kepco 150	50.00		
300	150	.5	150-5	None		Kepco 315	75.00		
500	300	.5		None	10	Kepco 500R	150.00		

CURRENT REGULATED

500	0-500	Yes	Yes	Dressen Barnes CC-503C	250.00
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TEST EQUIPMENT

HEWLETT PACKARD

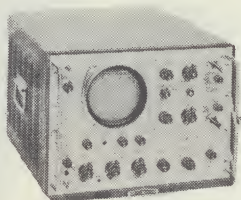
185A 500 MC

SAMPLING OSCILLOSCOPE

with 187A Dual Tracer Plug-In Unit

May be used to:

- Analyze millimicrosecond pulses
- Measure transistor response time
- Make fractional millimicrosecond time comparisons
- Measure diode switching times
- Determine pulse jitter
- Make permanent X-Y plots
- Measure memory-unit switching
- Measure uht voltage amplitude



\$950⁰⁰

used excellent cond.

FIXED ATTENUATOR

NARDA 756A

Attenuation:

10DB



\$17⁵⁰

FERRITE ISOLATOR

SYLVANIA: FD962

Waveguide dim.:

2-1/4" x 1-1/2"



\$55⁰⁰

DIPLEXER

Freq. Standards

50D8900

Range:

7.5-8.5 KMC

2 Resonant sections per channel.



\$150⁰⁰

WAVEMETER

Freq. Standards

20A26000

990-1130 MC

Range:

Complete with servo amplifier



\$225⁰⁰

VARIABLE CUTOFF ATTENUATOR

PRD 198

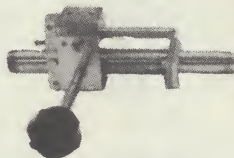
Freq. Range:

1-4 KMC/sec.

Attenuation Range:

100 DB

Two type N. Jacks



\$ 55⁰⁰

PRECISION GAGE

ATTENUATOR PRD 195 BSI

Freq. Range:

8.2-12.4 KMC

Attenuation Range:

50 DB

Waveguide Dim.:

1 x 1/2, Flange type

UG 39/u

\$85⁰⁰



INVERTER AMPLIFIER

ALICO 307A

Input:

2-200 mv. DC with 20

step attenuator

Freq. Response:

0-5000 cps.

Volt.Lin.:

.5%

Output:

±60 ma.

Power Requirements 255VDC @ 70 ma., 6.3VAC @ 2.4 amps. Ideal for pressure, torque, and vibration pickups as well as galvanometers and thermocouples.

\$59⁵⁰



RECORDING OSCILLOGRAPH

HEILAND 708C

30 Channel - Film Recording, width 8".

Record speed: range .03-144"/sec., ac-

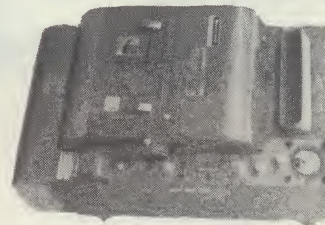
curacy ±2%. Power Requirement 115V

60 cy. Uses Minn. Honeywell series M

galvanometers, not supplied.

\$990⁰⁰

used excellent cond.



MICROWAVE

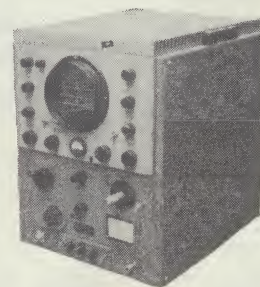
SPECTRUM ANALYZER

Vectron SA25. with RF assembly

25F.

\$725⁰⁰

used excellent cond.



VOLTMETER

GREIBACK INST. #700

Range:

0-7.5, 15, 30VDC

Accuracy:

.25%

Resistance:

30K ohms./volt.

\$165⁰⁰



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*
Previous company name and address

 <p>Fig. 1 Micro 6AS14 – DPDT</p>	 <p>Fig. 8 Micro BZ2RW82 – SPDT</p>	 <p>Fig. 17 Unimax MXT-2E-2362 – SPDT</p>	 <p>Fig. 26 Micro WZ7RQT – SPNC</p>
 <p>Fig. 2 Micro DT2RA7 – DPDT Micro BZR31 – SPDT Micro GR441 – SPNO Micro WZR – SPNC Micro WZR96A42 – SPNC Micro WZRE4 – SPNC Micro WZ7RTC – SPNC Micro WZ7RTC3 – SPNC Mu Switch Red Dot – SPNC</p>	 <p>Fig. 9 Micro BZ7RDTC – SPDT</p>	 <p>Fig. 18 Micro BZ3YDT – SPDT Micro YZ2RD – SPNO Micro YZ3RDT – SPNO</p>	 <p>Fig. 27 Micro WZ2RQTC1 – SPNC</p>
 <p>Fig. 3 Micro BZ2RW22 – SPDT</p>	 <p>Fig. 10 Micro BZ7RL21 – SPDT</p>	 <p>Fig. 19 Micro BZ2RW157 – SPDT</p>	 <p>Fig. 28 Unimax 2HBF37-1 SPDT</p>
 <p>Fig. 4 Micro BZR10 – SPDT</p>	 <p>Fig. 11 Micro 1HS6 – SPDT</p>	 <p>Fig. 20 Mu Switch KLG-3031 – SPNO</p>	 <p>Fig. 29 Micro WZRS86</p>
 <p>Fig. 5 Unimax WDHBTX166-1-DPDT</p>	 <p>Fig. 12 Unimax 2HBJ-1 – SPDT</p>	 <p>Fig. 21 Micro YZ3RLT1 – SPNO Micro WZ2RLT1 – SPNC</p>	 <p>Fig. 30 CH8871K1 – SPNC</p>
 <p>Fig. 6 Micro BZ2RS – SPDT Micro BZRSX – SPDT Micro GRS – SPNO Micro GZRSTC – SPNO Micro G7RST – SPNO Micro YZ2RST – SPNO Micro YZ2YST – SPNO Micro WZRS – SPNC Micro W27RST6</p>	 <p>Fig. 13 Micro BA3STO6 – SPDT Acro 2000540 – SPDT Acro C10039 – SPNO Micro WA1RX1-144 – SPNC</p>	 <p>Fig. 22 Micro BZ2RLT – SPDT Micro YZRL8 – SPNO Acro R075L2T – SPNO Acro XP45L – SPNO</p>	 <p>Fig. 31 Micro B17 – SPNO</p>
 <p>Fig. 7 Micro BZR8479-A2 – SPDT</p>	 <p>Fig. 14 Mu Switch RL – SPDT</p>	 <p>Fig. 23 CH A-1 – SPNO RC 12SB1P2T – SPNC</p>	 <p>Fig. 32 Micro BZ2RM37 – SPDT</p>
		 <p>Fig. 24 Micro WA3SBT1 – SPNC</p>	 <p>Fig. 25 Micro WZRO41 – SPNC</p>

ENCLOSED SWITCHES

MFR. PART NO.	FIG.	PRICE
Micro 9-11585	45	\$1.50
Micro LNE11-HN	46	1.25

SPNO

Micro 5VB1-2	47	\$1.00
--------------	----	--------

SPNC

Micro WZE2RNTN1	48	\$1.00
Micro WZE7RNT1	49 (no base plate)	1.00
Micro WZV7RNTN	50	1.00
Micro WZV7RQ9T1	51	1.00

2PNC / 1PNO

Micro 3VS4	52	\$1.25
------------	----	--------

DC SWITCHES N.C.

Mu B1	53	\$1.25
Mu Z	54	1.25

HERMETICALLY SEALED

MFR. PART NO.	CIRC.	FIG.	PRICE
Control Switch H2-31	SPST	55	\$1.00
Control Switch H6-3	DPDT	56	1.50
Control Switch H6-25-1	DPDT	57	1.50
Control Switch HC-12A	DPDT	58	1.50
Control Switch HS-23	DPDT	59	1.50
Control Switch HS-25-2	DPDT	60	.75

SUB SUB-MINIATURE SWITCHES

Mfr. Part No.	Circ.	Terminals	Fig.	Price
Control Switch T3	SPDT	S	61	.45
Control Switch T7	SPDT	S	61	.60
Control Switch T16	SPDT	S	61	.45

SUB-MINIATURE SWITCHES

Mfr. Part No.	Circ.	Terminals	Fig.	Price
Micro 1SM3	SPDT	S	62	\$.35
Micro 11SM1	SPDT	S	62	.35
Micro 11SM3	SPDT	S	62	.35
Micro 11SM22T2	SPDT	DT	62	.60
Micro 1SE115-6	SPDT	leads	63	.75
Control Switch E4-3	SPDT	S	62	.45
Control Switch E4-4	SPDT	S	62	.30
Control Switch E4-107	SPDT	S	62	.50
Control Switch E4-110	SPDT	T	62	.45
Control Switch E4-119	SPDT	T	62	.45
Control Switch E4-120	SPDT		62	.45
Control Switch E4-133	SPDT	LDT	62	.45
Haydon 6107	SPDT	S	64	.60

MINIATURE -SWITCHES

Mfr. Part No.	Circ.	Terminals	Fig.	Price
Micro V3-1	SPDT	Screw	65	\$.50
Micro V3-1D8	SPDT	Push on	65	.50
Micro V3-19	SPDT	Solder	65	.30
Micro V3-21	SPNC	Screw	65	.45
Micro V3-44	SPDT	Screw	65	.50
Micro V3-101	SPDT	Screw	65	.50
Micro V3-104	SPDT	Screw	65	.50
Micro V3-401	SPDT	Screw	65	.50
Micro V3-444	SPDT	Screw	65	.50
Control Switch F2-13	SPDT	Screw	65	.40
Control Switch S1-2	SPNO	Solder	66	.35
Control Switch S3-303	SPDT *	Solder	67	.60
Control Switch S3-311	SPDT *	Solder	67	.60
Licon 11-130011	SPNC	Solder	66	.35
Control Switch D4-1	DPNC	Solder	69	.80
Control Switch D4-4	DPDT	Solder	69	1.00
Control Switch D4-8	DPDT	Solder	69	1.00
Control Switch D8-4	DPDT	Solder	70	1.00
Control Switch D8-304	DPDT	Solder	70	1.00
Control Switch K3-4	TPDT	Solder	71	1.50
Haydon ES1251-2	SPNC	leads	72	.60
Acro 1MD21AXXA23M	SPDT	Solder	73	.45
Acro 3MD21-1A	SPDT	Solder	74	.35

*Reset type

ACTUATORS FOR V3 SWITCHES

MICRO PART NO.	FIG.	PRICE
JV1	75	\$.20
JV5	76	.30
JV7	77	.25
JV23	78	.50
JV50	76	.20
JV51	76	.20

ACTUATORS FOR SM SWITCHES

MFR. PART NO.	FIG.	PRICE
JS502	81	\$.30

DOOR INTERLOCKS

Mfr. Part No.	Circ.	Fig.	Price
Micro 2AC1	SPDT	82	\$1.00
Micro 3AC6	SPDT	82	1.00
Micro 3AC16	SPDT	82	1.00
Micro 4AC1	DPDT	83	1.50
Micro 22AC3	SPDT ³	82	.75
Micro 22AC5	SPDT	82	1.00

2 — push to operate position only

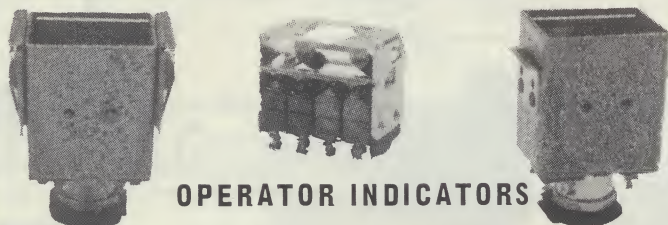
1 — RFE, S—Solder, T—Turret, DT—Double Turret

 <p>Fig. 33 Acro DR201 - SPNC</p>	 <p>Fig. 41 Micro H-LN-11 Micro HI-LN-12 Micro H-LN-13</p>	 <p>Fig. 47 Micro 5VB1-2 - NO</p>	 <p>Fig. 53 Mu B1 - DC/NC</p>
 <p>Fig. 34 Mn DXGR-5 - SPMC</p>	 <p>Fig. 42 Micro H-LNE-11</p>	 <p>Fig. 48 Micro WZE2RNTN1 - SPNC</p>	 <p>Fig. 54 Mu Z - DC/NC</p>
 <p>Fig. 35 Micro MC2711 (An3168-2)</p>	 <p>Fig. 43 Micro H-LE-12</p>	 <p>Fig. 49 Micro WZE7RNT1 - SPNC</p>	 <p>Fig. 55 Control Switch H2-31 - SPST</p>
 <p>Fig. 36 Micro AD5721H</p>	 <p>Fig. 44 Micro HO3-LN-13 Micro HO3-LN-0</p>	 <p>Fig. 50 Micro WZV7RNTN - SPNC</p>	 <p>Fig. 56 Control Switch H6-3 - DPDT</p>
 <p>Fig. 37 Micro MBH2731</p>	 <p>Fig. 45 Micro 9-11585 - SPDT</p>	 <p>Fig. 51 Micro WZV7RQ9T1 - SPNC</p>	 <p>Fig. 57 Control Switch H6-25-1 - DPDT</p>
 <p>Fig. 38 Micro JR</p>	 <p>Fig. 46 Micro LNE11-HN - SPDT</p>	 <p>Fig. 52 Micro 3VS4 - 2PNC/1PNO</p>	 <p>Fig. 58 Control Switch HC-12A - DPDT</p>
 <p>Fig. 39 Micro 9-11038-1LH</p>			 <p>Fig. 59 Control Switch HS-23 - DPDT</p>

PUSH BUTTON SWITCHES

Mfr. Part No.	Circ.	Button Hight & Color	Fig.	Price
Micro 1PB19	SPDT	3/8" Black	85	\$.75 ¹
Micro 1PB316T2	SPDT	3/16" Black	86	.75 ¹
Micro 2PB11	DPDT	3/16" Black	86	1.00 ¹
Micro 2PB11T	DPDT	3/16" Black	86	1.00 ¹
Micro 2PB11T2	DPDT	3/16" Black	86	1.00 ¹
Micro 2PB12T	DPDT	3/16" Red	86	1.00 ¹
Micro 2PB15T	DPDT	3/16,, Black	86	1.00 ¹
Micro 2PB75T	DPDT	3/16" Blue	86	1.00 ¹
Micro 2PB76T	DPDT	3/16" White	86	1.00 ¹
Micro 2PB262T2	DPDT	3/8" Black	85	1.00 ¹
Micro 2PB276	DPDT	3/16" Black	86	1.00 ¹
Micro 2PB277T2	DPDT	3/16" Black	86	1.00 ¹
Micro 3PB11T2	TPDT	3/16" Black	86	1.00 ¹
Micro 54PB101T2	4PDT		87	3.00 ¹
Micro 54PB101T2	4PDT		87	5.50 ¹
Micro 54PB66T2	4PDT	2 Pos. Alt. Action	88	4.25 ¹
Electro Snap C6-22	DPDT	2 Bulb Momentary	89	1.60 ¹

INDICATOR OPERATOR SWITCH MODULES



OPERATOR INDICATORS

Micro Part No.	No. of Sockets	Mounting	Price
2C1	2	Short Barrier type	\$1.00 ¹
2C3	4	Short Barrier type	1.25 ¹
2C4	2	Long Flange type	1.00 ¹
2C12	4	Short Flange type	1.25 ¹

INDICATORS (only)

2F4	2	Long Flange type	\$.75 ¹
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OPERATORS (non indicating)

2C55	0	Long Flange type	\$.75
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Mounting Barries for above units .20 @

SWITCHES SM TYPES

Mfr. Part No.	Circ.	Operation	Price
2D1	DPDT ²	Momentary Action	\$1.00 ¹
2D2	DPDT	Momentary Action	1.15 ¹
2D95	4PDT	Momentary Action	4.00 ²
2D26	DPDT	Alternate Action	1.50 ¹
2D33	4PDT	Alternate Action	3.00 ¹

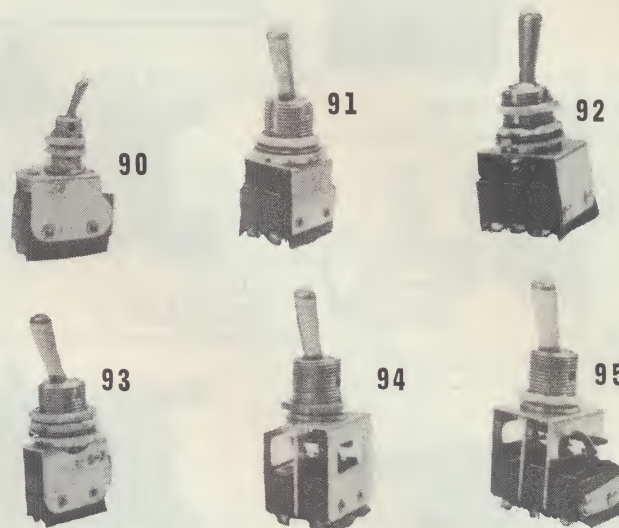
1 - RFE

2 - Gold contacts

SWITCHES V3 TYPES

Mfr. Part No.	Circ.	Operation	Price
Micro 2D70	SPDT	Momentary Action	\$.65
Micro 2D72	DPDT	Momentary Action	1.00

TOGGLE SWITCHES



Mfr. Part No.	Circ.	Fig.	Price
Micro 6AT2	SPDT	90	\$.60
Micro 6AT7	DPDT	91	.85 ¹
Micro 6AT19	TPDT	92	1.10 ¹
Micro 6AT22	SPDT	93	.60
Micro 23AT1	DPDT	94	.85 ¹
Micro 23AT2	TPDT	95	1.10 ¹

ROTARY SWITCH

MICRO 17AS63

Fig. 96

6 Circuit (Contains 6 ea. SPDT 1SM3 or equiv. switches).

Position 1 - All 6 switches actuated

Position 2 - No switches actuated

Position 3 - One switch actuated

New \$5.50

RFE 3.30






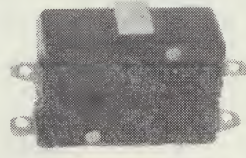

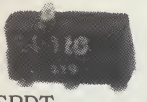



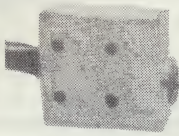
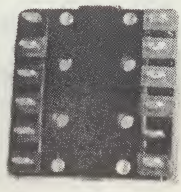




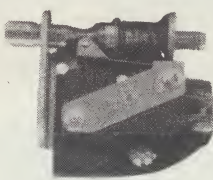
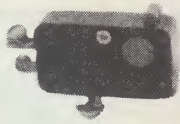


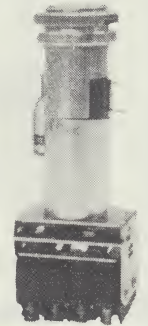




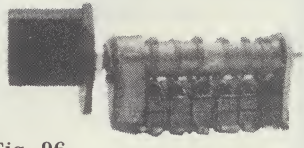
ROTO-TELLITE INDICATORS

Mastec Spec. Co.

Each window has white opaque plastic fronts. Permitting color coding or markings, to be inserted between layers. Each individual window contains 2 bulbs, 28VDC

	No. of Windows	Bulbs	Price
103-1045-2	3	# 327	\$ 3.00
11-1020-1	11	# 327	10.50



 <p>Fig. 60 Control Switch HS-25-2 - DPDT</p>	 <p>Fig. 67 Control Switch S3-303 - SPDT Control Switch S3-311 - SPDT</p>	 <p>Fig. 75 Micro JV1</p>	 <p>Fig. 86 Micro 1PB316T2 - SPDT Micro 2PB11 - DPDT Micro 2PB11T - DPDT Micro 2PB11T2 - DPDT Micro 2PB12T - DPDT Micro 2PB15T - DPDT Micro 2PB75T - DPDT Micro 2PB76T - DPDT Micro 2PB276 - DPDT Micro 2PB277T2 - DPDT Micro 3PB11T2 - TPDT</p>
 <p>Fig. 61 Control Switch T3 Control Switch T7 Control Switch T16</p>	 <p>Fig. 69 Control Switch D4-1 - DPNC Control Switch D4-4 - DPDT Control Switch D4-8 - DPDT</p>	 <p>Fig. 76 Micro JV5 Micro JV50 Micro JV51</p>	
 <p>Fig. 62 Micro 1SM3 - SPDT Micro 11SM1 - SPDT Micro 11SM3 - SPDT Micro 11SM22T2 - SPDT Control Switch E4-3 - SPDT Control Switch E4-4 - SPDT Control Switch E4-107 - SPDT Control Switch E4-110 - SPDT Control Switch E4-119 - SPDT Control Switch E4-120 - SPDT Control Switch E4-133 - SPDT</p>	 <p>Fig. 70 Control Switch D8-4 - DPDT Control Switch D8-304 - DPDT</p>	 <p>Fig. 77 Micro JV7</p>	 <p>Fig. 87 Micro 54PB101T2 - 4PDT</p>
 <p>Fig. 63 Micro 1SE115-6 - SPDT</p>	 <p>Fig. 71 Control Switch K3-4 - TPDT</p>	 <p>Fig. 78 Micro JV23</p>	
 <p>Fig. 64 Haydon 6107 - SPDT</p>	 <p>Fig. 72 Haydon ES1251-2 - SPNC</p>	 <p>Fig. 81 Micro JS502</p>	 <p>Fig. 82 Micro 2AC1 - SPDT Micro 3AC6 - SPDT Micro 3AC16 - SPDT Micro 22AC3 - SPDT Micro 22AC5 - SPDT</p>
 <p>Fig. 65 Micro V3-1 - SPDT Micro V3-1D8 - SPDT Micro V3-19 - SPDT Micro V3-21 - SPDT Micro V3-44 - SPDT Micro V3-101 - SPDT Micro V3-104 - SPDT Micro V3-401 - SPDT Micro V3-444 - SPDT Control Switch F2-13 - SPDT</p>	 <p>Fig. 73 Acro 1MD21AXXA23M - SPDT</p>	 <p>Fig. 83 Micro 4AC1 - DPDT</p>	 <p>Fig. 88 Micro 54PB66T2 - 4PDT</p>
 <p>Fig. 66 Control Switch S1-2 - SPNO Licon 11-130011 - SPNC</p>	 <p>Fig. 74 Acro 3MC21-1A - SPDT</p>	 <p>Fig. 85 Micro 1PB19 - SPDT Micro 2PB262T2 - DPDT</p>	 <p>Fig. 89 Electro Snap C622 - DPDT</p>
			 <p>Fig. 96 Micro 17AS63</p>

DIGITAL DISPLAYS

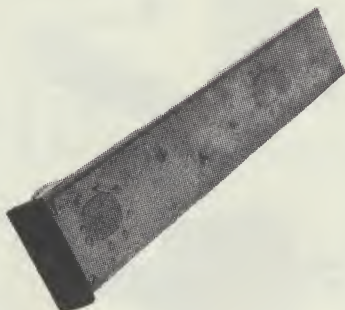
ALPHA NUMERICAL INDICATOR

64 CHARACTER READOUT INSTRUMENT

- Binary Decoding
- Data Storage
- Electrical Readout

U.S. & S. 376630

Characters 0-63 displayed. Employs a six bit code. Therefore, the number of different codes is $8 \times 9-8 = 64$, which is the maximum number of characters capable of being displayed on a 6 wire system.



CHARACTERS 0-63 DISPLAYED											
POS	CHAR- ACTER	CODE	POS	CHAR- ACTER	CODE	POS	CHAR- ACTER	CODE	POS	CHAR- ACTER	CODE
11	00	000000	19	02	010000	37	10	010100	55	03	110000
2	24	000110	20	25	100110	38	27	110110	56	17	100010
3	06	011000	21	14	000110	39	07	111000	57	04	001000
4	57	100111	22	59	110111	40	49	100011	58	56	000111
5	30	011110	23	23	111010	41	20	001010	59	22	011010
6	63	111111	24	53	101011	42	60	001111	60	61	101111
7	55	111011	25	52	001011	43	54	011011	61	62	011111
8	37	101001	26	44	001101	44	45	101101	62	47	111101
9	32	000001	27	34	010001	45	42	010101	63	35	110001
10	08	000100	28	09	100100	46	11	110100	64	01	100000
11	18	010010	29	26	010110	47	19	110010	65	16	000010
12	13	101100	30	15	111100	48	05	101000	66	12	001100
13	58	010111	31	51	110011	49	48	000011	67	50	010011
14	31	111110	32	21	101010	50	28	001110	68	29	101110
15	55	111011	33	52	001011	51	54	011011	69	62	011111
16	53	101011	34	60	001111	52	61	101111	70	63	111111
17	36	001001	35	38	011001	53	46	011101	71	39	111001
18	40	000101	36	41	100101	54	43	110101	72	33	100001

Size of Characters

HEIGHT 1875

WIDTH 102

LINE WIDTH 031

NOMINAL RUNNING TIME (71 BELT SPACES)

AT 26 VOLTS D.C. 1.7 SECONDS

NOMINAL OPERATING VOLTAGE 24-28 VOLTS D.C.

MOTOR STARTING CURRENT (26 VOLTS D.C.) 0.60A

MOTOR RUNNING CURRENT (26 VOLTS D.C.) 0.15A

DETENT MAGNET RESISTANCE 175 OHMS

INTERNAL RELAY RESISTANCE 750 OHMS

AVERAGE TOTAL RUNNING POWER ... 7.5 WATTS

STEADY STATE POWER 0.0 WATTS

LIGHTING CHARACTERISTICS 6 VOLT

INCANDESCENT LAMP

WEIGHT 16 OUNCES

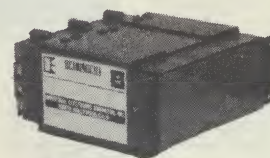
\$79⁵⁰

IN LINE DIGITAL READOUTS

I.E.E. SERIES 20000

Character size: 1". Viewing angle: 160°. Bulbs available in 6V, or 28V, please specify. Standard display 0, 1, 2, 3, 4, 5, 6, 7, 8, 9.

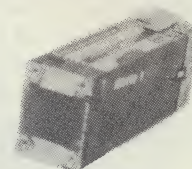
No. of Units	Stock No.	Price
1	20001	\$15.00
2	20002	27.50
3	20003	39.50
4	20004	51.50
5	20005	63.50



*To include two decimal points, one to the lower left and one to the lower right of each numeral. Please specify by indicating numeral position from left to right in indicator. For example: Stock #20004 (4 digit display) 1st display + and -, 2nd display decimal points, 3rd display decimal points, 4th Ok. To include + and - signs please follow the same procedure. There is no additional charge for this service.

I.E.E. SERIES 10000

Character size: 5/8". Viewing angle: 160°. 6V-328, or 28V-327 bulbs available, please specify. Displays 0, 1, 2, 3, 4, 5, 6, 7, 8, 9. Dim.: 1" wide x 1-5/16" high x 4" long.



\$17⁹⁵

I.E.E. SERIES 20000

Numerals 1" high. Visibility angle: 160°. Bulb 1820-28V. Displays the following numerals.

V _K	D _K	K
V _T	D _T	T
* red V _F	C.O.T.	V _P
circle D _P	O*	M



\$9⁹⁵

DIGITAL BUILDING BLOCKS

Engineered Electronics Ruggedized-Series Package designed for use in ground equipment at fixed installations. But, since they have better resistance to shock and vibration than standard series units, they are also suitable for services in mobile equipment.

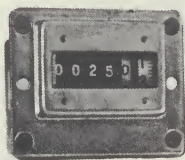
PART NO.	FUNCTION
8336/Z 92000	Flip Flop
8339/Z 92002	Flip Flop
8489/Z 92029	Pulse Amplifier
8762/Z 92033	Amplifier
8889/Z 92013	One Shot
90001/Z 92024	Squaring Circuit
90002/Z 92018	Gate Circuit
90083/Z 92089	Reset Generator
90084/Z 92087	DC Amplifier
90298/S 92090	Cathode Follower
90316/S 92091	Cathode Follower



\$5⁰⁰

ELAPSED TIME INDICATORS

CRAMER TYPE BH20L. 40V or 110/125VAC, 60 cy. with external resistor (which is supplied) @ 100 ma. Records elapsed time in hours, tenths and hundredths (1/100). Range: 0-9999.99 hrs. and repeats. Synchronous motor driven. White numerals 1/8" wide x 3/16" high on black for hour indications . . . black on white for 1/10 and 1/100 hour indications. Window dimensions: 1-7/8" x 1/2". Front panel mounting plate 3-1/8" wide x 2-5/8" high. Body 2 1/4" x 2 1/4" x 3-1/8" deep.



\$795

110V, 60 CYCLE

GENERAL ELECTRIC 8KT11DAA2T
Range 0-99,999.9 hours in 1/10 hrs. increments. 120V 60 cy. 2 1/4" dia. face: mts in hole 2 3/16" dia. 3 1/2" square face.

\$995



GENERAL ELECTRIC 8KT11CAA2
Range 0-99,999.99 hours in 1 1/10 hrs. increments. 120V 60 cy. 2 1/4" dia. face mts in hole 2 3/16" dia. 3 1/2" round face.

\$795

RFE



JBT 31 Ex. Range 0-99,999.9 hours in 1/10 hr. increments. 120V 60 cy. 2 3/8" dia. face mts in 2 5/8" dia. hole.

\$795

RFE



GENERAL ELECTRIC 8KT14AA2
Range: 0-99999 hours. 120V, 60cy. Mounts in 2-3/16" dia. hole 2-1/4" dia. face.

\$795

RFE



GENERAL ELECTRIC 8KT14AAA2M
Range: 0-99999 hours. 120V, 60 cy. 2-1/4" dia. face. Mounts in hole 2-3/16" dia.

RFE

\$795



J.W. HOBBS. Range: 9999.9 hours. 1120V 60 cy., 1-7/8" dia. face. Mounts in 2" dia. hole.

RFE

\$795



MARION HM2-ET. Range: 99999 hours. 120V, 60 cy., 2" dia. face. Mounts in 2-1/8" dia. hole.

\$995



G.E. 8KT8E3Y. Range: 99999 hours. 120V, 60 cy., 2-1/2" dia. face. Mounts in 2-3/4" dia. hole.

\$895



240V, 60 CYCLE

HAYDON ED71-001. 240V, 60 cy., 2.5 watts. Range: 9,999.9 hrs. Direct reading indicator. Face size: 1 1/4" square. Hermetically sealed. Req.: 1 1/2" mounting hole. Depth: 2-3/8".

RFE

\$795

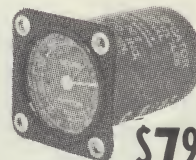


110V, 400 CYCLE

HAYDON 7008-002. 115V, 380 to 400 cy., 2 watts. Range: 0-10,000 hrs. in 10 hr. graduations. Clock face type with 2 pointers. Face size: 1 1/4" square. Hermetically sealed. Req.: 1 1/2" mounting hole. Depth: 2-3/8". Units have been removed from equipment and therefore show some elapsed time already recorded on face.

RFE

\$795



110V 400 CYCLE

■ Subminiature 5/8" dia.

Elgin 95A3A 115V, 400 cys, 1 Ø, 1 watt. 0-999 hours in 1 hour graduations. Clock face type with 2 pointers. Face Size: 5/8" Dept. 1 3/8" Hermetically sealed. Units have been removed from equipment, therefore show some elapsed time already recorded on face.

RFE

\$795



ELAPSED TIME & EVENTS INDICATOR 24 VDC

HAYDON E7844-P1. Range: 9,999.9 hours — Black figures on a white background. Also displays number of starts to a maximum of 99,000. Operates from 24-30VDC. Mounts in a 2" square hole x 2-1/2" deep.

\$2950

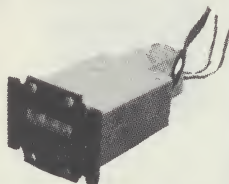


COUNTERS

HIGH SPEED QUICK RESET

4 DIGIT VEEDER ROOT 159104

3000 C.P.M. Operating voltage 24/48VDC, 6 watts. Reset coil 48VDC, 15 watts. May be driven by vacuum tube or transistor circuitry. Figures .188" high. Color, white on black.



\$17⁹⁵

6 DIGIT HIGH SPEED MAGNETIC COUNTER VEEDER ROOT AB159106

Specifications same as V.R. 159104 except 6 digits. Operating voltage 48VDC, 6 watts. Counter is not meant to be resettable, but may be reset from rear of panel by opening cover and manually moving ind. digits.

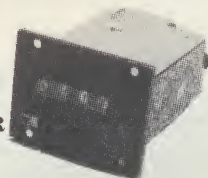


\$15⁹⁵

HIGH SPEED RESET MAGNETIC COUNTER

4 DIGIT VEEDER ROOT AH159104

Specifications same as V.R. 159104 except operating voltage is 115V, AC, - 6 watts and reset is manual by means of a push button on front of panel.



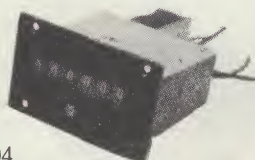
\$19⁹⁵

HIGH SPEED QUICK RESET MAGNETIC COUNTER

6 DIGIT VEEDER ROOT 159106

Specifications same as V.R. 159104. Except 6 digits and both operating and reset voltages are 24VDC.

RFE



\$19⁹⁵

8 DIGIT LARGE MAGNETIC COUNTER VEEDER ROOT D106108

A heavy duty counter. Operating voltage: 12-24VDC @ 5 watts. Figures: 8, white on a black background, 1/4" high. Adds one number per impulse. Dim.: 4-1/2" long x 1-1/4" deep x 3-3/16" high.



\$25⁹⁵

MAGNETIC COUNTER

VEEDER ROOT A126805

115V., 60 cy., 6 watts. Hi-speed. Figures: 5 digit, black on white. Base mtg. Dim.: 2-1/2" high x 1-3/4" wide x 1-1/2" long. Units have been removed from equipment and show some number of counts recorded on face.

RFE



\$10⁵⁰

5 DIGIT RESET MAGNETIC COUNTER

Imported Counter F106HD. Coil: 48VDC @ .18 amps. 1200 C.P.M. Resettable by means of ratchet wheel in back of front panel. Figures: 5, white on a black background, 3/16" high.



\$12⁹⁵

RESET MAGNETIC COUNTER

6 DIGIT VEEDER ROOT BH124806

115VDC 8 watts. Speed: 1000 C.P.M. Figures: 6 digit, black on a white background, .188" high. Manual reset. Dim.: 2-1/2" high x 3.9" long x 1.625" wide.



\$17⁹⁵

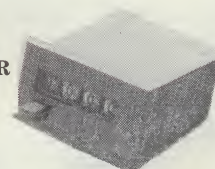
6 DIGIT VEEDER ROOT CV 120506

115VAC 8 Watts. Speed 1000CPM. Figures: 6 digit block on a white background .188" high. Displays numerals 000,000 thru 999,995. First digit reads 0 and 5, then second digit advances one. Dim.: 2-1/2" high x 3.9" long x 1.625" wide.

\$12⁹⁵

4 FIGURE MAGNETIC RESET COUNTER VEEDER ROOT 177604

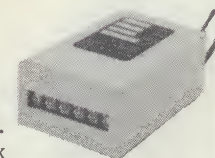
115VAC (Rectifier supplied). Basic counter is 115VDC, 6 watts 4 figure, black on white background. Push button reset. Dim.: 1-7/8" width 1-1/8" high x 2-1/2" deep.



\$19⁹⁵

6 FIGURE MAGNETIC COUNTER VEEDER ROOT CN177006

115VDC Hi speed counter 1000 CPM. Life 20 million counts. 6 Figures, black on white background. 2.5 watts. Back mounts. Dim.: 1-17/32" width x 1" high x 2-3/8" deep.



\$7⁹⁵

COUNTERS

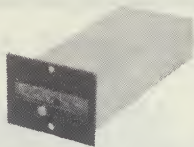
3 FIGURE RESET IMPULSE COUNTER
Presin Co. OZ3RA 1022 25 impulses per sec. Coil 24VDC Manual reset. Front panel button. Resets to zero by single push. Window 5/8" w x 1/4" high. Front panel 1-1/4" w y 1-7/16" high.

\$9⁹⁵



5 FIGURE RESET IMPULSE COUNTER
Sodico TCeZ5E 10 impulses per sec. Coil 24VDC @ 68 ma. Manual reset, front panel toggle action lever. Resets to zero at single stroke. Window 1-3/8" w x 1/4" w. Front panel 1-3/4" w x 1-1/4" high.

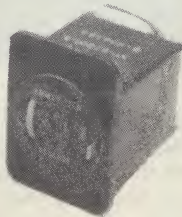
\$12⁹⁵



VEEDER ROOT 1031

3 digit, 24VDC, Resettable. Counts down, regestering on alternate pulses displaying even number totals only. Resets in either direction.

\$3⁵⁰



VEEDER ROOT EX62801-5

4 digit, 24VDC, Resettable. Counts down, regestering on alternate pulses displaying even number totals only. Resets in either direction.

\$2⁵⁰



SMALL PREDETERMINED RATCHET COUNTER

3 DIGIT VEEDER ROOT SERIES HJ-1122

Predetermined number is set in the counter by means of three setting knobs. In operation the counter subtracts to zero and @ that point actuates the SPDT switch. Subtracts 1 count for each oscillation of the lever, through an angle of 40°. Rotation: top coming. Shaft, left side. Figures .166" high. Color, white on black. Speed, 1000 CPM, max.

\$12⁵⁰



DIRECT DRIVE COUNTER

4 DIGIT VEEDER ROOT CM101644A

Counts ten units for each revolution of the shaft. Subtracts when run in opposite direction. Speed 800 RPM, 8000 C.P.M. Shaft on right side, C.W. rotation. Figures: 4, 2 black, & 2 red on white, .187" high. Base mtg. Dim.: 1-19/64" high x 31/32" wide x 1-13/16" long.

\$2⁹⁵



4 DIGIT COUNTER VEEDER ROOT FC101634

Specification same as VR CM101644A listed above, except all numerals are black and unit has no mtg. base.

\$2⁵⁰



5 DIGIT VEEDER ROOT CU101625

Specifications same as VR CM101644A listed above, except, shaft on left side C.C.W. rotation. Dim.: 1-19/64 high x 31/32" wide x 1-25/32 long.

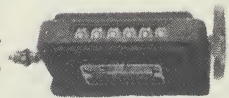
\$3⁵⁰



6 DIGIT RESET COUNTER VEEDER ROOT A153106

Direct drive counter. Adds ten counts per revolution of drive shaft and will not subtract beyond zero on right hand wheel when shaft is turned in reverse direction. Shaft on left side, rotation top going (C.C.W.). Figures; black on white, .188" high. Maximum count 5000 C.P.M. Overall dim.: 4-17/32" long x 1-9/16" high x 1-1/4" wide.

\$7⁹⁵



5 DIGIT SMALL RATCHET RESET COUNTER VEEDER ROOT SERIES C112245A

Adds one for each oscillation of the lever through an angle of 40°. Ratchet on right side (C.C.W. actuation), spring return. Figures: 5, white on black, .166" high. Speed 1000 C.P.M. maximum. Reset wheel on left side. Base mount. Dim.: 1-9/32 high x .960" wide x 1.42" long.

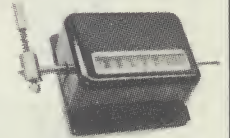
\$4⁵⁰



GIANT 6 FIGURE. COUNTER

West Germany Import: 0-999,999 Counter Stroke action, approx. 40° one count/stroke. Non-reset. Has two ended shaft; counts in coming direction. Also supplied with a single flexible stroke arm, 5/16" dia. x 2-7/8" long. Shaft out each side, 5/16" dia. x 1-1/2" long. Base mounting type. Dim: 4 x 4-1/4 x 2" high.

\$9⁹⁵



400 CYCLE FREQUENCY STANDARD

The systems designer will find a useful versatility in this rugged new frequency standard offering both long-term, high-precision output in mild environments and stable, predictable frequencies in severe force fields. Featuring a dynamically balanced metallic resonator.

Output freq: 400 cy.

Output reg: .001%

Output volt: 10V AC Peak-to-Peak square wave.

Input volt: 300V DC $\pm 1\%$ @ 5 ma.

Input volt: 28V DC @ 1 amp unregulated.

Unit is hermetically sealed for operation at any altitude, under all MIL ambients.

Mfr: Gyrex D57-28B.



\$29⁵⁰

400 CYCLE FREQUENCY GENERATOR

May be used as a frequency standard, tone generator, or with power amplifying equipment as a source of 400 cycles.

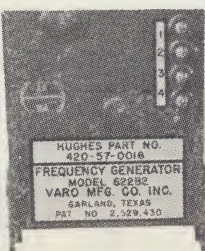
Output Frequency: 400 cy.

Output Regulation: $\pm .25\%$

Output Voltage: 15V RMS min.

Input Voltage: 28VDC @ 1.2 amps. max.

Tuning fork driven. Fork and associated equipment contained in hermetically sealed metal case 3 1/2" high x 3-3/16" wide x 1-5/8" thick. Mounts on four 6-32 studs. Varo 622B2.



\$19⁹⁵

AUDIO AMPLIFIER

The operational communication system has individual amplifiers (transmit and receive) in each station. It requires a single 2-wire audio channel for both functions. The system is designed to operate with noise-concencing type dynamic microphones. The amplifiers present a high impedance to the line. Thus, when operating into a low impedance line, a large number of stations may be connected or disconnected from the line without materially affecting the receive amplifier output. Input Microphone Amp. 150 microvolts nom. @ 5 ohms. Output Headset Amplifier. 200 milliwatts nom. @ 8 ohms. Distortion less than 1%, freq. response 500 - 5000 cyps. ± 1.5 d b. Power requirements; 28 V ± 3 VDC. @ 150 ma. Normally, Conferences do not use in excess of 75 stations, therefore, the practice has been to tie the output of the mike-amplifier directly to the line and the input of the headset amplifier to the same line. This impedance of the apir represents essentially 9000 ohms, and the headset amplifier of the pair also acts as the sidetone portion of the circuit when the microphone is energized at the apired mike-amplifier. Complete stations available. (write for info)



\$19⁹⁵

DIODE CONVERTER BALANCED BRIDGE

Full Wave Current Limiting Balanced Bridge. May be used for wheatstone bridge circuit ohmmeter circuit, etc.

Input: 180V AC max.

Output: 3.0 max. $\pm .06$ ma.

Balance: 2/10 of 1%

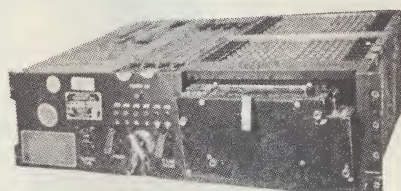
Temp. Correction: 0-160°F.

Mfr: U.S. Industries 577-001



\$5⁹⁵

PARABOLIC ARC COMPUTER



\$250⁰⁰

Contains magnetic memory drum, 21 transistorized plug-in boards, 400 cy. power supply with elapsed time indicator and blower. Designed for tape cartridge information feed (not supplied with unit). Original cost in the thousands of dollars. Manufacturer: Nortronics #5150800-513.

Feed cartridge available. **\$25.00**

MEMOTRON TUBE

Displays successive transients until intentionally erased. Permits direct comparison and analysis of wave forms without photography. Screen Diameter: 5". Standard phosphor: P1. Deflection: Electrostatic. Subject to inspection and test at your plant.

Used some may have burn spots.



\$99⁰⁰

ANALOG TO DIGITAL CONVERTERS

An accurate means of transposing rotary mechanical motion into an equivalent binary numerical notation. Output is unambiguous and with eight digits, 256 counts in a reflected binary code. Unit converts shaft position directly into a digital value.

ELECTRO MEC SIZE 15

Code: Reflected Binary

Resolution: 256 digits per 360°
(8 digits)

Accuracy: 1/3 digit (0°-28°)
without ambiguity

Cont. Rating: .002 amps.

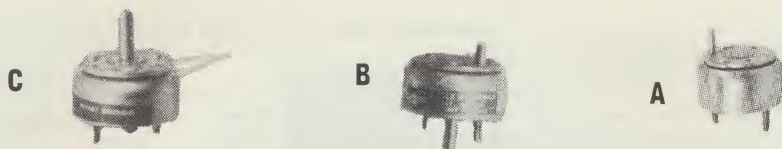
Shaft rotation: continuous

Speed: 300 RPM max.



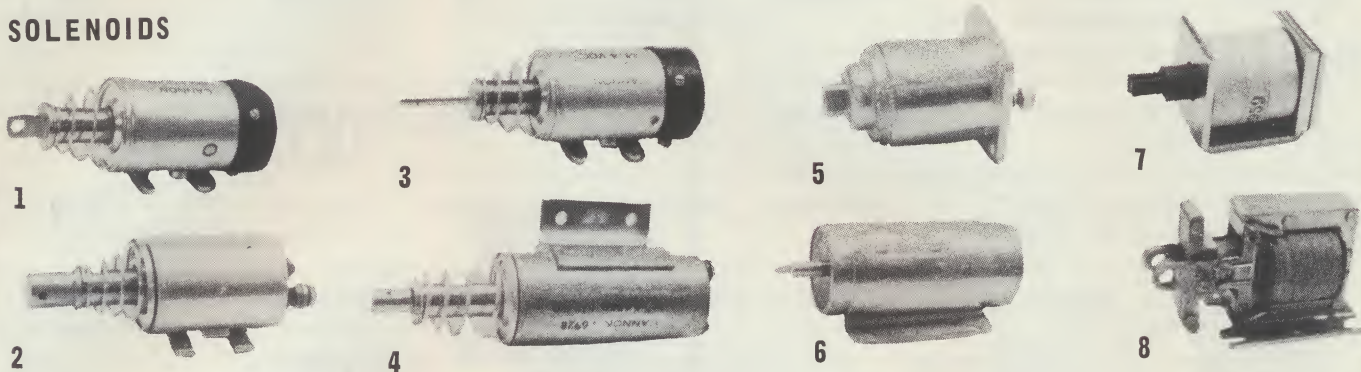
P/N	No. of Digits	Increase Code seq. rotation	Price
D15N-8	8	CW	\$59.50
D15P-G2	8/8	CCW	97.50

LEDEX ROTARY SOLENOIDS



Stroke	Ohms	Cont. Oper. Volt.	Torque at Rated Volt.	Int. Duty Oper. Range	Max. Torque	Dimensions		Stock No.	Fig.	Price
						Diameter	Height			
45° right	16.9	11VDC	.1	thru 36VDC	.7	1-1/8"	21/32"	B7649	A	\$1.50
45° right	112	28VDC	.1	thru 89VDC	.7	1-1/8"	21/32"	H1080-035	B	1.50
25° right	112	28VDC	.2	thru 89VDC	1.3	1-1/8"	21/32"	B61088-001	C	2.00
35° right	70.9	38VDC	.9	thru 120VDC	7.3	1-7/8"	1-3/64 "	072	A	2.50
67½° left	.71	5VDC	2.7	thru 16VDC	17.5	2-3/4"	1-55/64"	B60237	A	3.00

SOLENOIDS

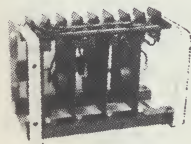


Coil Data		Dimension		Mfr. No.	Fig.	Price	
Stroke (Pull)	Voltage-Current	Dia. x Length					
3/4"	24VDC @ 400 ma.	1-1/2 - 2-3/4	Cannon 13870	1	\$2.50		
5/8"	24VDC @ 20 amp.	1-1/2 - 3	Caruthers & Fernandez 10-285	2	2.50		
1/2"	24VDC @ 400 ma.	1-1/2 - 2-7/8	Cannon 13797	3	2.50		
1"	24VDC @ 20 amp.	1-1/2 - 3-1/4	Cannon 16928	4	2.50		
5/16"	24VDC @ 1 amp.	1-1/2 - 2-3/8	Magnavox 14D89G1	5	2.50		
1/4"¹	24VDC @ 1.72 amp.	1-1/2-2-3/4	Wesco A-43	6	1.50		
1"	12VDC @ 600 ma.	1-1/2 - 2-1/8	Auto Sw. Co. 106S178	6	2.50		1 - Push Pull
3/4"²	115VAC Cont. duty	2"-2-1/2-1-21/64	Comar SL2 or equiv.	8	2.50		2 - 250 oz. in.
5/8"³	115VAC Cont. duty	1-7/16 - 1-1/4-7/8	Comar SL1 or equiv.	8	1.50		3 - 100 oz. in.

POLARIZED ELECTROLYTICS HIGH CAPACITY (Mfr. Mallory or Equiv.)

MFD	WVDC	PRICE	MFD	WVDC	PRICE
500	200	\$1.50	4500	40	\$2.25
500	310	2.00	5000	36	2.25
1250	175-180	2.00	7500	25	2.50
1500	80	1.35	8000	55	4.50
2500	80	2.00	10000	15	2.50

GERMANIUM RECTIFIER BRIDGE 115V



Full Wave Bridge. Input: 115-135V, 60 cy. Maximum current rating: 10 amps.
Mfr.: General Electric 4JA3011B

\$9.95

70V

Same as above except max. voltage is 70VAC. G.E. 45A3011A

\$6.95

DYNAMOTORS

COLONIAL RADIO CORP. DA3A

Input:	28V DC @ 10.5 amps.
Output:	300V DC @ 260 ma.
	150V DC @ 10 ma.
	14.5V DC @ 5 amps.



\$4.95

WESTINGHOUSE A35A8959

Input:	12V DC @ 13.2 amps.
Output:	325V DC @ .29 amps.



\$4.95

WINCO 4156

Input:	13V DC @ 13 amps.
Output:	250V DC @ 60 ma.
	300V DC @ 225 ma.



\$4.95

MINIATURE AUDIO TRANSFORMERS

Type	Application	Pri. Source Imped. (Ohms)	Sec. Load Imped. (Ohms)	Max. Level Pri. Volts	Freq. Resp.	Dim.*	Price
HS25	Single plate to p.p. class A grids	15,000	110,000 C.T.	25V	20-20,000	1-7/16 1-3/4 2-1/2	\$ 9.00
HS27	P.P. plates to p.p. class A grids	20,000/5,000	60,000 C.T.	50V	20-20,000	1-7/16 1-3/4 2-1/2	8.10
HSM31	P.P. 6J5's or parallel-fed 6F6 triode to AB grids	20,000/5,000	20,000 5,000 C.T.	240V	20-20,000	2-1/16 2-5/16 3-1/8	8.70
HS71	Plate to line DC in pri.	10,000(10Ma)	600/150	2 Watts	150-15,000	1-5/16 1-5/16 1-3/4	5.80
HS73	Plate to line or V. C. DC in pri.	5,000(40Ma)	500/250/16/8/4	5 Watts	300-3,000	1-5/8 1-5/8 2-3/8	6.20
HS75	P.P. plates to line or V.C.	10,000 C.T. (50 Ma bal.)	500/250/16/8/4	10 Watts	300-3,000	1-3/16 1-15/16 2-7/16	7.20
JO13	Plate to p.p. grids 3 MA. in pri.	15,000	95,000 C.T.	10 DBM	300-7,000	15/16 1-13/32	5.50

COMBINED PLATE AND FILAMENT - PRI. 115V, 50/60 CYCLE

TYPE	PLATE SUPPLY		FILAMENTS		DIM.*	PRICE
	AC VOLTS	DC MA.	VOLT	AMPS.		
HSM205	700 C.T.	70	6.3 C.T. 5	3 3	3-1/16 3-9/16 4-7/8	\$ 9.60
HSM211	700 C.T. 700V bias tap	150	6.3 C.T. 5 2.5	6 3 5	3-5/8 4-9/16 5-1/2	8.50
HSM218	1000/800 C.T.	300 (ch. input) 235 (cond. input)	6.3/5 6.3 C.T. 6.3	6 6 6	1-3/16 1-15/16 2-7/16	7.30

FILTER REACTORS

TYPE	CURRENT DC MA	INDUCTANCE HENRIES	RESIST. OHMS	DIM.*	PRICE
HSM307	120	12	185	3-1/16 3-9/16 3-7/8	\$ 6.80
HSM315	200	8	100	3-1/16 3-9/16 4-7/8	7.30

FILAMENT TRANSFORMERS 50/60 CYCLE

TYPE	PRIMARY VOLTS	VOLTS SECONDARY	AMPS.	DIM.*	PRICE
HSM225	105-115-125	6.3 C.T.	2	1-13/16 1-15/16 2-3/4	\$5.80
HSM226	105-115-125	6.3 C.T.	3/6	2-1/6 2-5/16 3-1/8	6.20
HSM227	105-115-125	6.3 C.T./6.3	3/3	2-3/8 2-3/8 3-13/16	7.60
HSM228	105-115-125	6.3 C.T./6.3	6/6	3-1/16 3-9/16 4-7/8	9.30
HSM229	105-115-125	6.3 C.T.	8	3-1/16 3-9/16 3-7/8	9.50

DC Stepping Switches

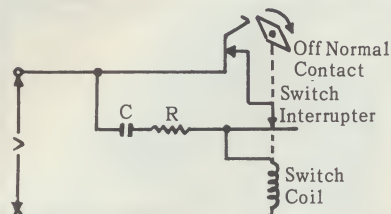
The high-speed, multi-contact rotary stepping switches are designed to perform these operations automatically:

- Predetermined count, connect, re-cycle, totalize.
- Transfer common circuits, one at a time, to secondary circuits.
- Select a particular circuit from among a number.
- Select an idle circuit from a group.

- Generating timed pulses at accurately spaced time intervals.
- When a complex circuit requires a large number of relays, a rotary stepping switch is often the simple solution.
- For low power switching or thermocouple monitoring, specify gold plated contacts.

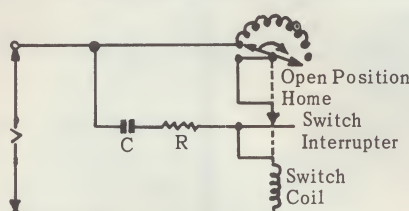
HOMING THE SPRING-DRIVEN STEPPER after the wipers are stepped through any number of positions.

Homing Through Off-Normal Contacts



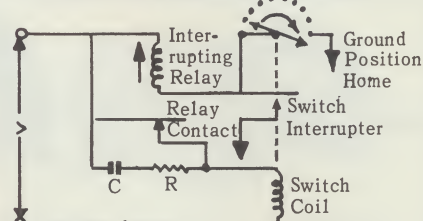
Self-interrupted stepping to the "home" position determined by the off-normal contact.

Homing Through Bank Level (Search for Open Contact)



Self-interrupted stepping of the switch to "home" position. Requires bridging wipers in the level used for "homing".

Homing Through Bank Level (Search for Grounded Contact)



Provides "homing" of the switch through the combined action of the interrupter contacts and an auxiliary relay. Requires an auxiliary relay with a coil for operation on the same voltage as the switch and with appropriate contacts.

AUTOMATIC ELECTRIC 44

C.P. CLARE 11

ELEVEN POSITION (10 Position and Off)

A Stepping Switch may have from one to eight bank levels of ten or eleven points each. It can function as either an 11-point or 10-point switch. Each bank level is traversed by a pair of wiper springs. When used as an 11-point switch, all eleven points will be active points. When used as a 10-point switch, there will be ten active positions and one zero position. The wipers can be arranged so that the several bank levels can be used independently to secure 10-point or 11-point operation, or in tandem to secure up to 33-point operation.

¹Interrupter springs are provided to open the drive circuit when the armature is attracted to the magnet and also to perform other desired control or signal functions. 11 contacts are provided for the first two levels of the switch. The remaining levels usually have only 10 contacts, ²preventing double loading when wipers step onto brush spring. Standard bank contacts and wipers are phosphor bronze. ³Gold plated bank contacts and wipers can be furnished, if indicated.

The following steppers are available for immediate delivery in either Automatic Electric or C.P. Clare. If a particular manufacturer is desired, please specify. We reserve the right to substitute one manufacturer for another unless otherwise stated.

1 - N.C. interrupter springs are provided. N.O. interrupter springs can be provided @ no extra cost. 1 A & B/or SPDT interrupter springs can be provided @ \$.50 add. DPDT interrupter springs can be provided @ \$2.00 add.

2 - Full levels can be provided @ no extra charge if specified.

3 - Gold plated contacts and wipers @ \$1.75 per physical level. Taper tab terminals @ \$.50 per level on C.P. clare units only.

4 - Br. - Bridging Wiper.

Bridging wipers momentarily interconnect successive contacts as they move from one to the next, maintaining the circuit through the switch without interruption during the operation of the rotors.

Automatic Electric 44



C.P. Clare 11



Circuits ⁴			Stock Nos.				Price Each
Total	Br.	N. Br.	8-12V	24-36V	48-60V	100V	
2	1	1	SS100	SS112	SS124	SS136	\$13.00
2	0	2	SS101	SS113	SS125	SS137	13.00
3	1	2	SS102	SS114	SS126	SS138	14.00
3	0	3	SS103	SS115	SS127	SS139	14.00
4	1	3	SS104	SS116	SS128	SS140	16.00
4	0	4	SS105	SS117	SS129	SS141	16.00
5	1	4	SS106	SS118	SS130	SS142	17.00
5	0	5	SS107	SS119	SS131	SS143	17.00
6	1	5	SS108	SS120	SS132	SS144	18.00
6	0	6	SS109	SS121	SS133	SS145	18.00
8	1	7	SS110	SS122	SS134	SS146	21.00
8-	0	8	SS111	SS123	SS135	SS147	21.00

N. Br. - Non-bridging Wiper.

Non-bridging wipers disconnect the trailing contact before touching the next contact.

Contacts rated 3 amps. at rest, .1 amp. switching.

**For assemblies not listed above
(22 contact, 33 contact, and other circuit arrangements)
see CUSTOM ASSEMBLIES, page 67**

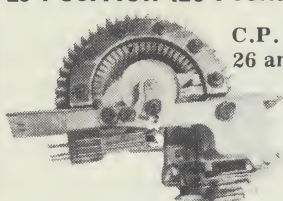
Off-normal springs are available for above steppers. See page 67

DC Stepping Switches

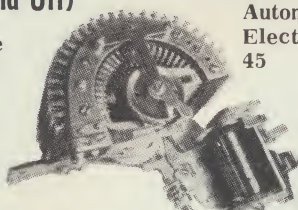
AUTOMATIC ELECTRIC 45 C.P. CLARE 26

These Stepping Switches may have from two to twelve bank levels of 25 to 26 points each. They can function as either 25-point or 26-point switches. When used as a 26-point switch, all 26 points will be active points. When used as a 25-point switch, there will be 25 active positions and one zero position. The wipers can be arranged so that the several bank levels can be used independently to secure 25-point or 26-point operation, or in tandem to secure 52-point operation.

26 POSITION (25 Position and Off)



C.P. Clare
26 and 52



Automatic
Electric
45

Circuits ⁴				Stock Nos.				Price Each
Total	Br.	N. Br.	8-12V	24-36V	48-60V	100V		
1	0	1	SS148	SS169	SS190	SS211		\$16.00
2	1	1	SS149	SS170	SS191	SS212		21.75
2	0	2	SS150	SS171	SS192	SS213		21.75
3	1	2	SS151	SS172	SS193	SS214		23.00
3	0	3	SS152	SS173	SS194	SS215		23.00
4	1	3	SS153	SS174	SS195	SS216		24.25
4	0	4	SS154	SS175	SS196	SS217		24.25
5	1	4	SS155	SS176	SS197	SS218		25.50
5	0	5	SS156	SS177	SS198	SS219		25.50
6	1	5	SS157	SS178	SS199	SS220		26.75
6	0	6	SS158	SS179	SS200	SS221		26.75
7	1	5	SS159	SS180	SS201	SS222		28.00
7	0	7	SS160	SS181	SS202	SS223		28.00
8	1	7	SS161	SS182	SS203	SS224		29.30
8	0	8	SS162	SS183	SS204	SS225		29.30
9	1	8	SS163	SS184	SS205	SS226		30.60
9	0	9	SS164	SS185	SS206	SS227		30.60
10	1	9	SS165	SS186	SS207	SS228		32.00
10	0	10	SS166	SS187	SS208	SS229		32.00
12	1	11	SS167	SS188	SS209	SS230		36.50
12	0	12	SS168	SS189	SS210	SS231		36.50

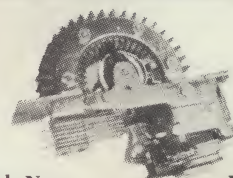
52 POSITION

Circuits ⁴				Stock Nos.				Price Each
Total	Br.	N. Br.	8-12V	24-36V	48-60V	100V		
1	1	0	SS324	SS336	SS348	SS360		\$21.75
1	0	1	SS325	SS337	SS349	SS361		21.75
2	1	1	SS326	SS338	SS350	SS362		24.25
2	0	2	SS327	SS339	SS351	SS363		24.25
3	1	2	SS328	SS340	SS352	SS364		26.75
3	0	3	SS329	SS341	SS353	SS365		26.75
4	1	3	SS330	SS342	SS354	SS366		29.30
4	0	4	SS331	SS343	SS355	SS367		29.30
5	1	4	SS332	SS344	SS356	SS368		32.00
5	0	5	SS333	SS345	SS357	SS369		32.00
6	1	5	SS334	SS346	SS358	SS370		36.50
6	0	6	SS335	SS347	SS359	SS371		36.50

¹Interrupter springs are provided to open the drive circuit when the armature is attracted to the magnet, and also to perform other desired control or signal functions. 26 contacts are provided for the first two levels of the switch. The remaining levels usually have only 25 contacts,² preventing double loading when wipers step onto brush spring. Standard bank contacts and wipers are phosphor bronze. ³Gold plated bank contacts and wipers can be furnished, if indicated.

The following steppers are available for immediate delivery in either Automatic Electric or C.P. Clare. If a particular manufacturer is desired, please specify. We reserve the right to substitute one manufacturer for another unless otherwise stated.

20-position and 40-position phosphor bronze wipers and contacts. Specifications otherwise similar to C.P. Clare 26.



C.P. CLARE 20

Circuits ⁴				Stock Nos.				Price Each
Total	Br.	N. Br.	8-12V	24-36V	48-60V	100V		
1	0	1	SS232	SS247	SS262	SS277		\$17.00
2	1	1	SS233	SS248	SS263	SS278		18.00
2	0	2	SS234	SS249	SS264	SS279		18.00
3	1	2	SS235	SS250	SS265	SS280		19.00
3	0	3	SS236	SS251	SS266	SS281		19.00
4	1	3	SS237	SS252	SS267	SS282		19.75
4	0	4	SS238	SS253	SS268	SS283		19.75
5	1	4	SS239	SS254	SS269	SS284		20.75
5	0	5	SS240	SS255	SS270	SS285		20.75
6	0	6	SS241	SS256	SS271	SS286		21.50
6	1	5	SS242	SS257	SS272	SS287		21.50
7	0	7	SS243	SS258	SS273	SS288		22.50
7	1	6	SS244	SS259	SS274	SS289		22.50
8	0	8	SS245	SS260	SS275	SS290		23.50
8	2	6	SS246	SS261	SS276	SS291		23.50

C.P. CLARE 40

Circuits ⁴				Stock Nos.				Price Each
Total	Br.	N. Br.	8-12V	24-36V	48-60V	100V		
1	1	0	SS292	SS300	SS308	SS316		\$18.00
1	0	1	SS293	SS301	SS309	SS317		18.00
2	1	1	SS294	SS302	SS310	SS318		19.75
2	0	2	SS295	SS303	SS311	SS319		19.75
3	1	2	SS296	SS304	SS312	SS320		21.50
3	0	3	SS297	SS305	SS313	SS321		21.50
4	1	3	SS298	SS306	SS314	SS322		23.50
4	0	4	SS299	SS307	SS315	SS323		23.50

1 - N.C. interrupter springs are provided. N.O. interrupter springs can be provided @ no extra cost. 1 A & B/ or SPDT interrupter springs can be provided @ \$.50 add. DPDT interrupter springs can be provided @ \$2.00 add.

2 - Full levels can be provided @ no extra charge if specified.

3 - Gold plated wipers and contacts available at \$3.50 extra per physical level.

4 - Br. - Bridging Wiper.

Bridging wipers momentarily interconnect successive contacts as they move from one to the next, maintaining the circuit through the switch without interruption during the operation of the rotors.

N. Br. - Non-bridging Wiper.

Non-bridging wipers disconnect the trailing contact before touching the next contact.

Contacts rated 3 amps. at rest, .1 amp. switching.

For Assemblies not listed above
see CUSTOM ASSEMBLIES, page 67

DC Stepping Switches

MINOR SWITCH

Direct Drive Stepping Switches offer a mode of switching quite similar to that provided by Spring-Driven Stepping Switches. However, they differ in two important characteristics:

1. A pawl coupled directly to the moving member of the driving electromagnet assembly engages a ratchet and advances it step each time the driving coil is energized.
2. Return to "home" position is effected by energizing the reset electromagnet which disengages the detent and permits the wiper assembly to rotate in the reverse direction past the contacts previously traversed.

* Br. — Bridging Wiper.

Bridging wipers momentarily interconnect successive contacts as they move from one to the next, maintaining the circuit through the switch without interruption during the operation of the rotors.

N. Br. — Non-Bridging Wiper.

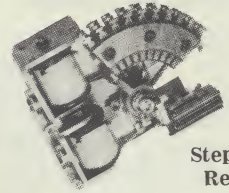
Non-bridging wipers disconnect the trailing contact before touching the next contact.

Contacts rated 3 amps. at rest, .1 amp. switching.

Off-normal springs are available for above steppers. See below

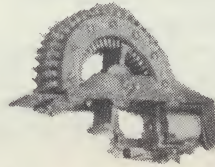
10 STEPS AND OFF

Two coil step and reset. Standard bank contacts and wipers are phosphor bronze. Gold plated contacts and wipers can be furnished, if indicated.



Circuits*			Stock Nos.				Price Each
Total	Br.	No.Br.	8-12V	24-36V	48-60V	100V	
1	0	1	MS500	MS503	MS506	MS509	\$13.50
1	1	0	MS512	MS517	MS522	MS527	13.50
2	0	2	MS501	MS514	MS507	MS510	14.25
2	2	0	MS513	MS518	MS523	MS528	14.25
2	1	1	MS514	MS519	MS524	MS529	14.25
3	0	3	MS502	MS505	MS508	MS510	15.00
3	3	0	MS515	MS520	MS525	MS530	15.00
3	1	2	MS516	MS521	MS521	MS526	15.00

AUTOMATIC ELECTRIC TYPE 13-25 POSITION



Circuits*			Stock Nos.				Price Each
Total	Br.	N. Br.	6-12V	24-36V	48-60V	100V	
2	1	1	SS400	SS410	SS420	SS430	\$13.00
2	0	2	SS401	SS411	SS421	SS431	13.00
3	1	2	SS402	SS412	SS422	SS432	14.00
3	0	3	SS403	SS413	SS423	SS433	14.00
4	1	3	SS404	SS414	SS424	SS434	15.00
4	0	4	SS405	SS415	SS425	SS435	15.00
5	1	4	SS406	SS416	SS426	SS436	16.00
5	0	5	SS407	SS417	SS427	SS437	16.00
6	1	5	SS408	SS418	SS428	SS438	17.00
6	0	6	SS409	SS419	SS429	SS439	17.00

The type 13 is an inexpensive, compact stepping switch which is capable of performing all the functions of the more expensive types with the exception of the off-normal switch. However, the off-normal function can also be accomplished by using an extra level on the stepper. The life expectancy of the type 13 is comparable with more expensive units.

13-50 POSITION

Circuits*			Stock No.				Price Each
Total	Br.	N. Br.	6-12V	24-36V	48-60V	100V	
1	0	1	SS440	SS446	SS452	SS458	\$13.00
1	1	0	SS441	SS447	SS453	SS459	13.00
2	1	1	SS442	SS448	SS454	SS460	14.00
2	0	2	SS443	SS449	SS455	SS461	14.00
3	1	2	SS444	SS450	SS456	SS462	15.00
3	0	3	SS445	SS451	SS457	SS463	15.00

CUSTOM ASSEMBLIES

FOR STEPPING SWITCHES NOT LISTED, simply arrange a table like the example below. Under each heading insert the specifications that describe the way you want the switch equipped. Please include ALL information, to expedite processing of your order.

The example below illustrates an order for a 5 level Type 44 switch to operate on 24 volts DC, equipped with two bridging and three non-bridging wipers with 1C combination interrupter and off-normal springs. It is arranged for 10-point operation.

Type	Voltage	Number of Bridging Levels	Number of Non-Bridging Levels	Interrupter Spring Combination	Off-Normal Spring Combination	Number of Contacts (Points)
44	24DC	2	3	1C	1C	Levels ¹ A through C: 11 pts. Levels D through F: 10 pts.

Prices submitted upon request for all custom assemblies.

¹ Level "A" is level nearest ratchet wheel

OFF-NORMAL SPRINGS AVAILABLE AS FOLLOWS:

1C \$1.25 1B, 1C \$2.00
2C \$3.00

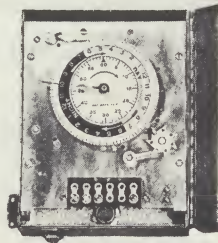
TIMERS

24 HOUR TIMER

Zenth Electric #P15-24C....An electrical control, designed to operate precise short duration signals, on a pre-determined schedule, over a set reference period of 24 hours.

Large, easy-to-read 24 Hour dial, with built-In "Skipper" (Sunday - Holiday) feature. Switch is S.P.S.T. Normally Open, rated- 5 A. @ 115 VAC. (can be made S.P.D.T. with simple internal wiring change). Switch and motor circuits isolated. This Timer provides (24 hour) programmed switch closures, with 15 minute intervals between operations, and with an adjustable (2 to 60 second) switch closure for signaling applications.

For 115 VAC., 60 Cycle operation. This Program Timer furnished with 9 trippers, 3 skipper screws and detailed instructions. In a metal case, 8½ high x 6½ wide x 4" deep, with hinged lid and knockouts.

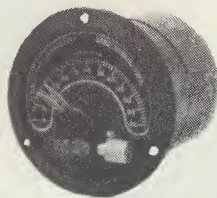


RFE

\$19.50

THRU-PANEL MTG DELAY TIMERS 60 SECOND TIMER

R.W. CRAMER T.E. 60S. Adjustable Timer. Range 3-60 seconds. Contacts S.P.S.T. N.C., Contacts open after preset time is reached. Motor: 115V 60 cy. Panel Mounts in 3-1/8" dia. hole.



\$14.95

15 SECOND TIMER

CRAMER T.E.R. 15S. Adjustable Timer. Maximum timing range 0-15 seconds. Contacts: SPDT rated 10 amps. @ 115VAC non. ind. Motor and Clutch operate on 7.5V 60 cy. Panel Mounts in 3-1/8" dia. hole. For use on 115VAC order bell transformer (BT. TER15S-10V) @ \$1.50 additional.

5 MINUTE TIMER

CYCL-FLEX HP23S103A6. 115V, 60 cy. Maximum timing cycle 5 minute with 3 second dial divisions. Multiple switching arrangements may be achieved.



\$17.50

60 MINUTE TIMER

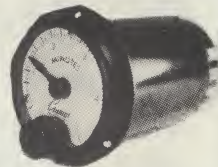
ATCOTROL TYPE 305 115V. 60 cy. Max. Timing cycle 60 min. with 30 second dial divisions. Repeat accuracy .25%. Reset time: less the 1/10 of a second. Six basic (contact) circuit arrangements provide an infinite number of combinations for control of automatic functions. Contains continuous 4-S.P.D.T. switches. Contacts rated 10 amps @ 115VAC. Panel mounts in a 3-1/8" dia. hole 4-1/2" deep.



\$19.95

5 MINUTE TIMER

Cramer #412E-5M. .115 Volt, 60 cy., 8 watt (coil & clutch). Contacts: 15A. @ 115VAC. Adjustable range, 0-5 Minutes; 5 sec. dial calibrations. Overall accuracy ±1/2 of 1% of full scale. Repeat accuracy .25%. Reset Time - full scale .5 seconds. Dim.: 3-1/16 Dia.: x 4-72/32 long.



\$19.95

FUNCTION

1. S.P. N.O. Contact closes when the Clutch is energized, and opens when clutch is de-energized.
2. S.P.D.T. Contact transfers when the clutch is energized, and transfers back when present time cycle ends.
1. S.P.D.T. Contact, N.O. closes when clutch is energized and transfers at the end of preset time; opens when clutch is de-energized.

Unit may also be operated push-button start and stop, or across the line, or for other timing circuits. Panel mounts in a 3" dia. hole; 4-1/2" deep. New.

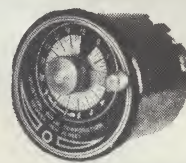
\$19.95

30 SECOND TIMER

CRAMER 412W 30S. Specifications same as Cramer # 412E-5M above, except maximum timing cycle is 30 seconds, with .5 second dial divisions.

INDUSTRIAL TIMER TD-15S.

- Automatic instant reset
 - Synchronous motor
 - Magnetically operated gear shift clutch
- Maximum timing cycle. 15 seconds with 1/4 second dial divisions. Dimensions: 3" diameter x 2-23/32" long.



Used, Guaranteed

\$9.95

ABRAMS INTERVALOMETER ABRAMS INSTRUMENT CORP. MODEL B10A.

- Ideal for furnishing pulses directly to other equipment and control systems.

Furnishes a 28VDC pulse of 0.25 second duration at regular time intervals... variable from 1 sec. Removed from to 24 sec. Pulse is capable of supplying 3 amps. to an inductive load. Relays may be used where pulses of higher ratings are required. Ideal for use in connection with instrumentation systems requiring electrical pulses at accurately spaced time intervals. Remote start and stop unit may be connected to a remote switch or relay to start and stop transmission of pulses. When circuit is opened, the Intervalometer remains energized with its time motor running, ready for instant operation. Turning interval knob off stops the time motor and de-energizes the Intervalometer. Motor operating voltage: 24VDC nom.



\$39.50

Knob Setting	Deviation	Knob Setting	Deviation
1 sec.	.025 sec.	6 sec.	.07 sec.
2 sec.	.035 sec.	8 sec.	.09 sec.
4 sec.	.05 sec.	10 sec.	.10 sec.

12 through 24 seconds - 1% of setting.

Overall dimensions: 2-3/16" diameter, 4½" depth behind panel, 1½" front of panel. Weighs only 1.62 lbs.

Timers (cont.)

Time Delay Timers introduce a pre-set time delay between the closure of one circuit and the operation of another. This function can be initiated remotely, or operate as an integral function of the parent device. The timer will automatically reset at the breakage of the circuit, enabling it to re-function almost immediately.

PANEL MTG. DELAY TIMERS

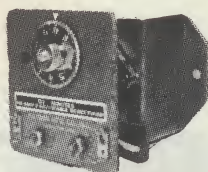
HAYDON. Automatic reset. As soon as clutch is disengaged, an internal spiral spring brings the actuating arm back to reset position. Time setting adjustment is quick, easy and accurate. Contacts rated 10 amps., non-inductive.

CAT. NO.	MAX. TIME CY.	DIAL DIV.
5901-1	15 Sec.	.15 Sec.
5901-4	5 Min.	1.2 Sec.
5901-3	*10 Min.	6.0 Sec.

Available in 115V or 220V, 60 cy. Please specify voltage with order.

*115V only.

Any Range



\$7⁹⁵

30 SECOND TIMER

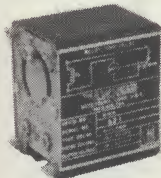
HAYDON KC125. Adjustable Timer. Maximum timing range 30 seconds. Contacts: S.P.D.T. rated at 10 amps. 115VAC non-ind. Motor synchronous, 115V 60 cy.



\$7⁹⁵

22.5 MINUTE TIMER

HAYDON K11419. Adjustable Timer. Timing range 4-22.5 minutes. Contacts: S.P.D.T., rated at 10 amps. 115VAC non-ind. Motor synchronous, and Clutch Voltage 115VAC, 60 cy.



\$9⁹⁵

VOLTAGE

Time Delay	Motor	Clutch	Contacts	Fig.	Mfr. & No.	Price
3 sec.	28VDC	28VDC	SPDT	1	Haydon M6445	\$5.95
30 min.	28VDC	28VDC	SPDT	1	Haydon Q6426	5.95
20 min.	28VDC	28VDC	SPDT	1	Haydon S6489	5.95
60 sec.	28VDC	28VDC	DPDT	1	Haydon M6499	6.95
15 min.	28VDC	28VDC	SPDT ²	3	Cont. 2115	5.50
30 sec.	28VDC	28VDC	SPDT ²	14	Haydon H6499	5.50
5 min.	28VDC	115V, 400 cy.	SPDT	4	Cramer 430H	5.95
15 min. ¹	28VDC	28VDC	SPDT	3	Haydon D6493	5.95

VOLTAGE

Max. Adj. Delay	Motor	Clutch	Contacts	Fig	Mfr. & No.	Price
1 min.	28VDC	28VDC	SPDT ²	2	Haydon D6420	\$5.95
1 min.	28VDC ³	28VDC	SPDT	2	Haydon M6415	9.95

1 - 7 min. delayed reset.

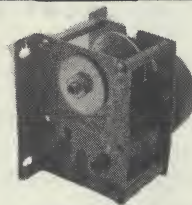
2 - 1/2 of switch used to discon. motor @ end of cycle.

3 - Chronometrically Gov. Motor.

4 - Plug in.

1 MINUTE TIMER

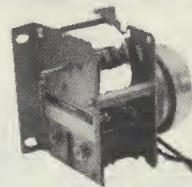
HAYDON BCM-18. 1 Minute Adjustable Timer, with 2 S.P.D.T. switches. One switch is used as a S.P.D.T. adjustable timer which closes a circuit @ end of preset time cycle. The second S.P.D.T. switch is driven by an adjustable Cam. and can be set so switch is actuated from 5% to 95% of timing cycle. Motor synchronous, 115V., 60 cy. Contacts rated @ 15 amps. 115VAC.



\$12⁹⁵

REPEAT CYCLE TIMER

HAYDON BME 447. 1 Minute Timer. 2 Gang - S.P.D.T. - snap action switches, Contacts rated 20 amps. @ 250VAC. Driven by a 115V., 60 cy. synchronous motor and 2 split Cams, which are easily adjusted. Cam can be set so switches are actuated from 5% to 95% of total time cycle. Each cycle automatically repeats.



\$12⁹⁵

PRECISION TIMER \$39⁵⁰

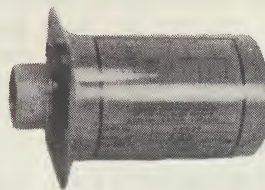
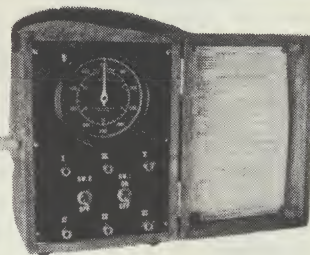
- 28VDC
- 30 Seconds Maximum
- Divisions in Milliseconds

Standard Electric Time Company Model S1-24DCR. Thirty-second timer which reads to one millisecond. Timer face is 3-5/8" diameter. One hand reads to 30 seconds in half second divisions.

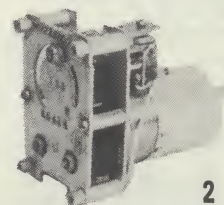
Other hand reads to 500 milliseconds in one millisecond divisions. Accuracy .005 seconds up to 1/10 second interval; 5% over 1/10 second interval. Built-in clutch and relay assemblies permit use as:

1. Clutch operated interval timer
2. Pulse duration timer
3. Interval timer for space between two pulses

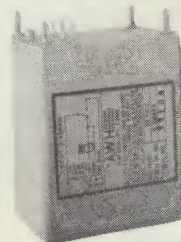
Instant reset lever above timer dial. Six chrome binding posts and two switches provide complete external connections. Hand rubbed walnut case 6-3/8" wide, 8 3/4" high, 7" deep. Leather carrying strap. Motor 28VDC @ 400 ma; clutch 28VDC @ 500 ma. Two relays 28VDC @ 280 ma. each.



1



2



3



4

TIME DELAY RELAYS

AGASTATS

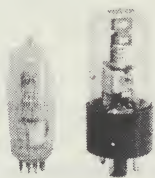
The Agastat is an electrically operated, pneumatically timed, adjustable time delay relay. Unaffected by voltage variations, it gives reasonable repetitive accuracy. DPDT contacts are rated at 5 amps., SPST db at 15 amps., both at 115 VAC non-inductive. Re-cycling time is 0.02 seconds.

Agastat Part No.	Delay Sec.	Contacts	Slow	Stock No.	Price
ND12	.15-5 min	DPDT SB *	24VDC	TD 390	\$ 6.50
ND21	.15-5 min	SPDT DB **	24VDC	TD 885	6.50
NE11	.15-5 min	SPDT DB *	115V, 60 cy.	TD 409	10.00
NE12	.15-5 min	DPDT SB *	115V, 60 cy.	TD 410	12.00
NE21	.15-5 min	SPDT DB **	115V, 60 cy.	TD 411	10.00
NE22	.15-5 min	DPDT SB **	115V, 60 cy.	TD 412	12.00
NE22	.15-5 min	DPDT SB **	220V, 60 cy.	TD 413	12.00
DEB22T	.30-15 min	DPDT SB **	220V, 60 cy.	TD 414	12.00
DEY22T	.2-30 sec	DPDT SB **	110V, 60 cy.	TD 363	18.50
2112DH1	.03-3	DPDT SB*	28VDC	TD 353	\$18.00
2122D5	.03-3	DPDT SB**	28VDC	TD 622	18.00
2112DH1	.75-10	DPDT SB*	28VDC	TD 351	18.00
2112DH3	.75-10	DPDT SB*	28VDC	TD 355	18.00
2112DH1	2-60	DPDT SB*	28VDC	TD 352	18.00
2112DH2	2-60	DPDT SB*	28VDC	TD 392	18.00
2112DH3	2-60	DPDT SB*	28VDC	TD 356	18.00
2112DH3	10-120	DPDT SB*	28VDC	TD 357	18.00
2122DH1	10-120	DPDT SB**	28VDC	TD 551	18.00
SFA22SG1	.03-4	DPST SB**	28VDC	TD 655	12.00
SFC22HSSC	.03-4		28VDC	TD 656	12.00

*Timing starts when coil is energized

**Timing starts when coil is de-energized

THERMAL TIME DELAY RELAYS



For continuous operation at rated voltage on AC, DC, or pulsating current. Consumes 2 watts. Contacts: 3 amps. at 115 VAC. Maximum voltage between contacts and heater is 1500 VDC. Temperature compensated for -55° to +70°.

Delay Sec.	Cont. SPST	Volts AC/DC	Mfr. and No.	Stock No.	Price
5	N.O.	26.5	Edison B2011	TD503	\$1.85
30	N.O.	5	Edison B1624	TD388	1.85
30	N.O.	6.3	Sheldon 6-030	TD372	1.85
30	N.O.	26.5	Amperite 26NO30	TD364	1.85
30	N.O.	115	Amperite 115NO30	TD627	1.85
30	N.O.	115	Edison B1569	TD369	1.85
30	N.O.	115	Amperite 115NO30T	TD629	1.85
60	N.C.	26.5	Amperite 26NC60T	TD654	1.85
60	N.O.	115	Amperite 115NO60	TD625	1.85
105	N.O.	26.5	Edison B2017	TD504	1.85
150	N.O.	115	Amperite 115NO150		1.85
120	N.O.	115	Amperite 115NO120	TD367	1.85
180	N.O.	117	Edison 501 (B2133)	TD371	1.85
210	N.O.	26.5	Edison B2109	TD505	1.85
300	N.O.	26.5	Sheldon 260300	TD379	1.85



2112
2122



ND
NE



SFA
SFC

G.V. ADJUSTABLE TIME DELAY RELAY

Hermetically sealed, compensated thermal timing relays, adjustable over a wide range without affecting seal. Types: -M-7 pin miniature plug; -O octal; -F flange and solder type terminals. Contacts: 6 amps.



G-V Part No.	Range Sec.	Time Set At Sec.	Volts AC/DC	Cont. SPST	Stock No.	Price
HM-01	.25-1	.25	20	N.O.	TD393	\$5.50
HM-01	.25-1	1	28	N.O.	TD650	5.50
HM-04	1.2-4.5	3	28	N.C.	TD403	5.50
HM-04	1.2-4.5	3	28	N.O.	TD404	5.50
HM-04	1.2-4.5	4	28	N.O.	TD501	5.50
TF-06	3-8	3	28	N.C.	TD515	5.50
TF-06	3-8	3	28	N.O.	TD507	5.50
TF-10*	8-12		28	N.O.	TD511	5.50
RM-20	3-25	5	28	N.O.	TD405	5.50
RM-20	3-25	5	115	N.C.	TD376	5.50
RM-20	3-25	15	28	N.O.	TD401	5.50
RF-20	3-25	20	115	N.C.	TD397	5.50
RF-30	5-35	30	28	N.C.	TD400	5.50
RF-30	5-35	30	115	N.O.	TD634	5.50
RO-30	5-35	30	115	N.O.	TD406	5.50
RF-60	15-75	60	48	N.O.	TD652	5.50
RM-60	15-75	60	28	N.O.	TD620	5.50
RO-60	15-75	71	35	N.C.	TD653	5.50
RM-80	20-100	60	28	N.O.	TD375	5.50
RM-80	20-100	65	5.4	N.O.	TD373	5.50
RF-80*	20-100	88	6.3	N.O.	TD513	5.50
RF-120*	30-150	120	230	N.O.L	TD512	5.50
RF-160	40-200	120	120	N.O.	TD360	5.50
RM-160	40-200	150	6	N.O.	TD374	5.50
RF-160*	40-200	160	26.5	N.C.	TD370	5.50
RH-160	40-200	180	27.5	N.O.	TD521	5.50
RF-160	40-200	240	27	N.O.	TD398	5.50
RO-160	40-200		64	N.O.	TD514	5.50
RF-162	40-200	205	28	N.O.	TD523	5.50

*RFE

DIFFERENTIAL RELAYS



SIGMA



BARBER

A three-position relay in which the armature does not engage either set of contacts in the unenergized condition. One polarity of energizing current will cause armature motion in one direction; opposite polarity will cause armature motion in the opposite direction.

Relay armature normally occupies one closed position when unenergized. Coil signals of correct polarity and magnitude transfer the armature to the other position. Removal of this signal, or application of one of opposite polarity, will return the armature to the normally-closed position.

Relay armature has two stable positions. Signals of one polarity only cause the armature to transfer from a given fixed position to the other, where it remains until a signal of opposite polarity returns it to the original position.

*DPDT moving contacts close and open alternately to same set of fixed contacts.

THREE POSITION, CENTER STABLE

Mfr. & No.	Ohms	Oper. Ma. DC	Cont.	Base	Stock No.	Price
Sigma 23KOXC1000GSIL	1000	2.5	1C	Octal	DR152	\$7.50
Sigma 23KOXC4200GDSIL	4200	1.7	1C	Octal	DR104	7.50
Sigma 23KOXC15000	15000	.63	1C	Octal	DR153	7.50
Sigma 23RJ2 (91326)	5700/5700	2.1	2C*	Solder	DR150	7.50
Sigma 23JX (91236)	5700/5700	2.1	2C*	Solder	DR151	7.50
Sigma 7JOX	14.7/5200	120/6.5	1C	Octal	DR262	5.00
North Electric 235AE-302-524	30/5200	120/6.5	1C	Octal	DR262	6.00
Simpson 800C	7000	10 u a	1C	Octal	DR250	6.00
Sigma 6HXAA1000S (80363)	1000	2.9	2A	Solder	DR251	8.50
Sigma 6HXAA1000 (80362)	1000	9	2A	Solder	DR252	8.50
Barber Colman AYLZ3105S	140	.194VDC	1C	Octal	DR111	7.00
Barber Colman AYLZ3104P	215	.71	1C	Octal	DR112	7.00
Barber Colman AYLZ5369S	3550	.39VDC	1C	Octal	DR106	7.00
Barber Colman AYLZH3316P	10K/10K	6	1C	A.N.	DR108	7.00
Barber Colman AYLZH4614S	1500	.265	1C	Octal	DR109	7.00
Sigma 23RJXC4200G-D-SIL	4200/4200	1.7	1C	Solder	DR155	7.00

TWO POSITION, MAGNETICALLY BIASED

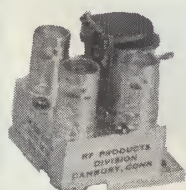
Mfr. & No.	Ohms	Oper. Ma. DC	Cont.	Base	Stock No.	Price
Sigma 7KOY2500GSIL	2500	1.3	1C	Solder	DR103	\$7.00
Sigma 73RJSY1600G (91065)	1600	4.7	1C	Solder	DR105	7.00
Sigma 7JOY (90422)	2K/3.5K	1.6/1.2	1C	Octal	DR110	7.00

TWO POSITION, MAGNETIC LATCH-IN

Mfr. & No.	Ohms	Oper. Ma. DC	Cont.	Base	Stock No.	Price
Sigma 6HZ4C700GDSIL	700	24VDC	4C,	Solder	DR160	\$8.00
Sigma 7JOZ5K (80030)	5K	.5	1C	Solder	DR161	7.00
Barber Colman AYLZ2542P	215	.35VDC	1C	Solder	DR107	7.00
Sigma 32WD1200GD	1.2K/1.2K	24-28	2C	Solder	HSM1000	8.50

COAXIAL RELAY SWITCHES

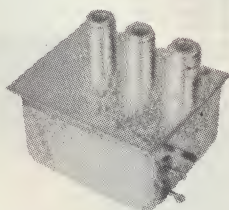
Antenna switching relays may be used to switch a single antenna from receiving to sending and vice-versa.



315



319



320

FXR No.	Contacts	Connectors	Power Watts	Voltage	Weight	Price
315	SPDT	BNC	100	26/48VDC ¹	4 oz.	\$6.50
315	SPDT	Solder	100	26/48VDC ¹	4 oz.	6.00
319	SPDT	BNC	100	26.5VDC	8 oz.	9.50
320	SPDT	N	1000	26.5VDC	20 oz.	8.50

1 - Specify Voltage 26.5VDC or 48VDC

SPDT COAXIAL SWITCHES

Thompson Products Inc. C4N2HB

Type N Connectors. 28VDC coil. Dimensions: 2 1/4" diameter x 4 1/2" long.

\$19⁹⁵

Airtron 72462CBHF

SPDT, H Band, 26VDC. Motor driven.

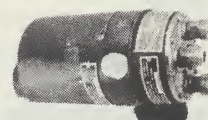
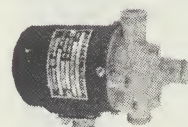
\$19⁵⁰

Transco Products Inc. 1460-2

Type N Connectors. 28VDC coil.

Dimensions: 7" long x 3" dia.

\$22⁵⁰



AC RELAYS

6 VAC

Contacts		Mfr. & No.	Fig.	Stock No.	Price
Circ.	Amps.				
1C	5	P & B KR5AE	30	H301	\$2.50
2C	5	P & B KR11A	24	KP119	2.50
3X	15	Rowan FE30	2	KP104	3.50
3X	**	Rowan FE30LE2	2	KP105	3.00
6X	***	Rowan XF 1949	2	KP112	4.50
8X	10	Rowan FE80LE	2	KP106	6.00



2



3



6



5

24 VAC

Contacts		Mfr. & No.	Fig.	Stock No.	Price
Circ.	Amps.				
2C	10	P & B AB11A	3	KP154	\$3.00
2C	15	Ohmite DOSX-162T	9	KP266	2.50



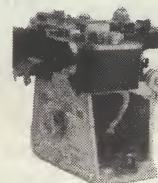
7



8

115 VAC

Contacts		Mfr. & No.	Fig.	Stock No.	Price
Circ.	Amps.				
1A	5	P & B KRP1A	25	KP369	\$3.00
1A, 1B	15	Ohmite DOSX 319	26	KP215	2.25
1C	5	P & B KR5A	24	KP277	2.50
1C	5	P & B KRP5A	25	KP236	3.50
1C	15	Ohmite DOSX350	26	KP216	2.25
1A, 1C	15	Ohmite DOSX351	26	KP217	2.50
1D	2	Leach 1120	5	KP110	2.50
1W	15	Leach 1257AC	6	KP107	3.00
1X	20	P & B PR3A	7	KP308	3.00
1X	20	Ward Leonard 106-6124	8	KP306	3.00
1X	20	Ward Oeonard 106-6515	8	KP307	3.00
1X	50	Allied CNAS13A	9	KP124	3.50
1X	50	Allied CNASH13A	23	H315	3.50
1Y	15	Leach 1352BF	6	KP109	3.00
NC*	15	Allied BOHRX86	10	H310	3.50
2A	5	Wheelock RX1103	11	KP500	2.00
2A	5	Guardian 1200	14	KP234	1.50
2A	15	Ohmite DOSX290	26	KP218	2.50
2A	25	Guardian 2210	7	KP100	3.25
2A	25	P & B PR7AY	7	KP101	3.50
2A	25	RBM 75-250301-2510	12	KP205	3.00
2C	15	Allied BO6A	9	KP125	3.50
2C	15	Ohmite DOSX 263	26	KP221	3.50
2C	5	Omega 2C	14	KP102	2.50
2C	5	Comar C3849	15	H394	2.50
2C	5	Struthers Dunn 119XBX144	16	HP191	2.50
2C	5	P & B KRP11A	25	KP119	4.50



9



10



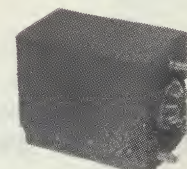
11



12



14



15



16



23

* Momentary break

**2-15 amp. contacts

1-10 amp. contacts

***3-15 amp. contacts

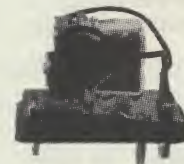
3-10 amp. contacts



24



25



26



30

AC RELAYS (continued)

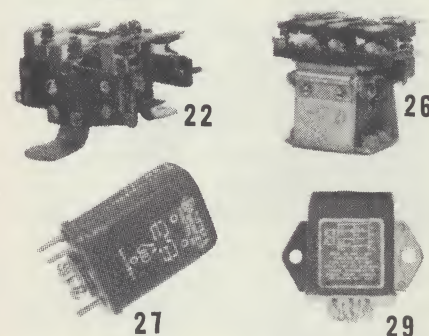
115 VAC

Contacts		Mfr. & No.	Fig.	Stock No.	Price
Circ.	Amps.				
2C	15	Leach 1357	16	KP108	\$ 3.00
2C	15	Ohmite DOSX 263	26	KP219	3.00
2C	10	RBM 94523	17	KP271	3.00
3C	15	Price 2109-9HS	19	H384	3.50
3X	15	Rowan FE30	2	KP111	3.50
4C	2	P & B MH7541	27	H304	6.00
4C	10	Leach 9224-5534	29	H300	7.50
6C	5	Leach 9226-4439	20	H1116	9.50

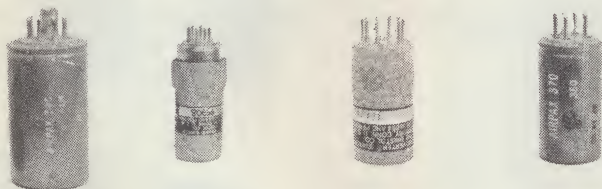


208 VAC

Contacts		Mfr. & No.	Fig.	Stock No.	Price
Circ.	Amps.				
2A	10	P & B AB1076	3	KP159	\$ 3.00
2C	15	Allied BO6A	9	KP224	3.00
2C	15	Ohmite DOSEPX-7	26	KP227	3.00
3C	8	P & B MR14A	22	KP160	3.00
4C	10	Ohmite DOX 130T	26	KP223	4.00
4C	10	Ohmite DOX 261	26	KP222	4.00
4C	10	Ohmite DOX 264	26	KP226	4.00



CHOPPERS



Choppers came into widespread use with the appearance of a wide variety of servo-mechanisms and DC amplifiers. In both modulation and demodulation systems, there arises a need for high stability and freedom from zero shift, or that characteristic which results in an output signal when no input signal is present. The contact device is unique in that it solves the problem of a stable minimum resistance by being close to zero when closed, and presents a maximum resistance which approaches infinity when open. In addition, it can be used effectively at both low and high impedances.

MFR. & NO.	DRIVE	FREQ. CPS.	CONTACTS CKT.	DWELL	BALANCE	PHASE	TEMP.	BASE	NOISE	PRICE
Bristol C1016	6.3V	400 cy.	SPDT (1D)	170°±15°	15	57°±10°	A	Solder	20 mv	\$ 9.00
Bristol C1413*	6.3V	400 cy.	DPDT (2D)	160°±15°	15	64°±10°	B	Min 9	4 mv	5.00
C1430	6.3V	400 cy.	DPDT (2D)	160°±15°	15	64°±10°	B	Min 9	4 mv	5.00
Bristol 95903-(1)-(6)	1.2V/6V†	60 cy.	DPDT (2D)	—	—	—	—	Solder	—	8.00
" "	1.2V	400 cy.								
Bristol 95908-1	6.3V	400 cy.	SPDT (1D)	170°±15°	15	57°±10°	A	Min 7	20 mv	12.00
Bristol 95908 (-22)	6.3V	400 cy.	SPDT (1D)	170°±15°	15	57°±10°	A	Min 7	1.5 mv	12.00
Airpax 300	6.3V	400 cy.	SPDT (1D)	147°±18°	15	65°±15°	C	Min 7	1.5 mv	9.00
Airpax 370**	6.3V	400 cy.	SPDT (1D)	160°±15°	15	55°±15°	B	Min 7	1.5 mv	9.50
Airpax 520	6.3V	400 cy.	SPDT (1D)	—	—	—	—	Octal	—	5.00
Airpax 586	6.3V	60 cy.	SPDT (1D)	158°±18°	—	40°±15°	D	Octal	2 mv	6.00

A = -55°+100°C
 B = -65°+125°C
 C = -65°+100°C
 D = -40°+85°C

* Superseded by Model C1430

** Vibration

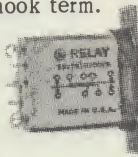
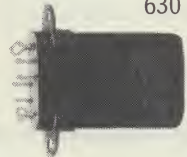
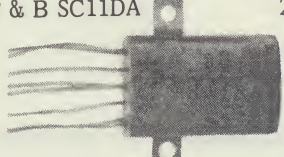
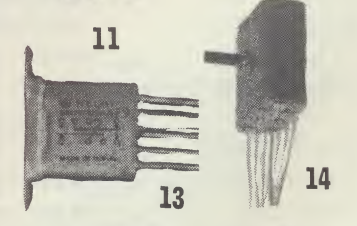
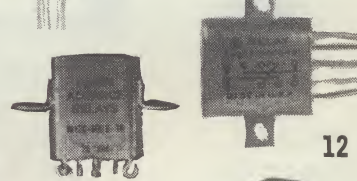
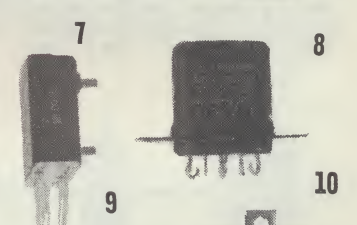
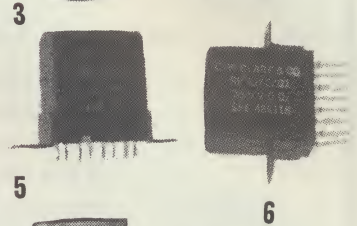
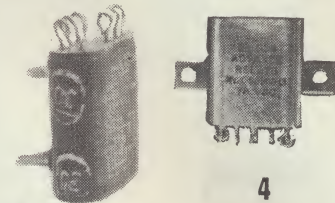
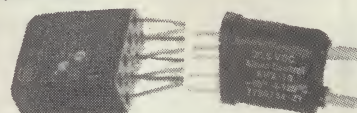
† Employing a 15 ohm series resistor

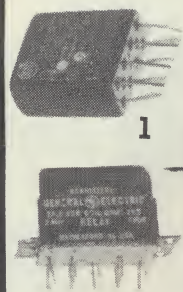
CRYSTAL CAN HERMETICALLY SEALED RELAYS

\$600

Extremely small (average size 3/4" x 5/16" x 1"), lightweight (average weight 0.4 oz.), sealed units for printed circuit and transistorized applications. Despite their microminiature size, these units are specifically designed for reliability and long life. Contact rating: 2 amps. resistive @ 28VDC or 115VAC.

Mfr. No.	Nom. VDC	Ohms	Terminals	Mounting	Fig.	Stock No.
Aemco 95-2029	28	700	1 1/2" lead	top flange	13	HSM300
Allied KHX5	26.5	800	3" lead	none	1	HSM286
Allied KHX10	26.5	675	3" lead	2 top studs	2	HSM273
Allied KHX11	72	5K	3" lead	2 top studs	2	HSM311
Allied KHX31	26.5	650	3" lead	none	1	HSM292
Allied KHX44	72	5K	2" lead	none	1	HSM270
Allied KHX131	26.5	800	plug-in	bottom flange	5	HSM276
Allied KHX-179	26.5	800	hook term.	bottom flange	10	HSM317
Allied KHJX113*	110	10K	3" lead	2 side studs	9	HSM310
Allied KHYX106	26.5	600	3" lead	none	1	HSM282
Allied KHYX126	26.5	650	hook term.	side plate	4	HSM274
Babcock BR8H-500C2-6.7-20	6.7/20V	500	3" side plate	side plate	21	HSM318
C.P. Clare RP7630G32	26.5	675	hook term.	none	7	HSM278
C.P. Clare RP9896G2	26.5	675	hook term.	side plate	4	HSM281
C.P. Clare RP9896G9	26.5	675	hook term.	side plate	4	HSM299
C.P. Clare RP9896G42	26.5	675	hook term.	side plate	4	HSM279
C.P. Clare RP10316G1	26.5	1250	hook term.	middle flange	11	HSM308
C.P. Clare RP11522G1	26.5	650	plug-in	middle flange	6	HSM277
Cont. Dyn. C8.5ES4L4KL	4.6/12.9 ma.	4K	3" lead	2 side studs	9	HSM307
Elgin MV2C-600D13	26.5	600	hook term.	side plate	4	HSM271
Elgin MV2C600D14	26.5	600	hook term.	none	7	HSM312
Elgin MV2C600D16	26.5	600	hook term.	middle flange	11	HSM290
Elgin MV2C-5000D13	78	5K	hook term.	side plate	4	HSM287
Elgin MV7002	26.5	600	hook term.	2 top studs	8	HSM288
Elgin MV7263	26.5	600	hook term.	bottom flange	10	HSM289
Elgin MV7359	26.5	600	hook term.	none	7	HSM285
Filtors P26AF1H6A-1	26.5	550	hook term.	2 top studs	8	HSM291
Filtors P26A1H6A	26.5	600	hook term.	bottom flange	10	HSM301
Filtors P26B5H6A	26.5	600	hook term.	2 side studs	3	HSM298
Filtors P32B17J6A1	32		hook term.	2 top studs	8	HSM315
Filtors S28A1H6A	28	110	hook term.	bottom flange	20	HSM319
G.E. 3S2791G200AH9VA	26.5	552	hook term.	bottom flange	10	HSM302
G.E. 3S2791G200AF9	26.5	552	3" lead	top flange	13	HSM293
G.E. 3S2791G200BA9EE	26.5	552	4" lead	2 side studs	9	HSM303
G.E. 3S2791G200H9	26.5	552	3" lead	side plate	12	HSM280
G.E. 3S2791G200V9	26.5	552	hook term.	bottom flange	19	HSM313
G.E. 3S2791G210A7	20.8 ma.	430	plug in	none	18	HSM320
G.E. 3S2791G210E11	9 ma.	2556	hook term.	2 side studs	3	HSM305
G.E. 3S2791G277DK39J	26.5	600	hook term.	2 top studs	8	HSM304
G.E. 3S2791G300M20LM	26.5	700	3" lead	1 side stud	14	HSM272
G.E. 3S2791G201N9EE	26.5	552	hook term.	2 top studs	8	HSM295
Hi G. (2B-1163) 4061C	26.5	600	plug-in	bottom flange	16	HSM296
Iron Fireman R602-4-A-2K	10 ma.	2K	hook term.	middle flange	17	HSM316
Iron Fireman R602-4-A-10K	4.5 ma.	10K	hook term.	middle flange	17	HSM297
Iron Fireman R805-4-D-5K	2.8 ma.	5K	hook term.	bottom flange	10	HSM306
Phil Trol 30-27GJ	26.5	675	hook term.	2 side studs	3	HSM309
Phil Trol 30-49AR	26.5	1250	hook term.	middle flange	11	HSM308
P & B SC11DA	24	630	hook term.	middle flange	11	HSM284



**MAGNETIC LATCHING POLARIZED FORM Z**

Sigma 32WD1200GD	Source	1.2K	3" lead	none	1	HSM1000
	24-28	1.2K				
Sigma 32RJPD24GD	65 ma. 3VDC	24/24	hook term.	bottom flange	10	HSM1001
4PDT						
G.E. 3SAH111A2	28VDC	765	plug-in	bottom flange	22	HSM314

GENERAL PURPOSE RELAYS

Precision manufactured under rigid quality control. Offers lightweight, rugged compact construction for high environmental conditions. Applicable to instrument, geophysical aircraft controls, and many other circuits where high reliability and multiple switching is required. Specifications: vibration 15 g's 1000 cps., shock 50 g operation. MH6: operates 8 millisees, releases 5 millisees, contacts 2 amps. @ 28VDC or 115VAC non-inductive.

**ALLIED**

Type	Contacts	Nom. VDC	Ohms	Temp. *	Terms **	Mtg.	St. No.	PRICE
MH6D	2C	26.5	400	A	S	1	HS710	\$6.00
MH6D	2C	96	4100	A	S	1	HS796A	6.00
MHB6D	2C	26.5	325	B	S	1	HS703	6.00
MHBD6D	2C	26.5	325	B	S	5	HS802A	6.00
MHBE6D	2C	26.5	325	B	S	2	HS877A	6.00
MHO6D	2C	26.5	400	A	P	4	HS1000A	6.50
MHBO6D	2C	26.5	325	B	P	4	HSA	6.50
MH12D	4C	26.5	300	A	S	8	HS728	6.50
MHB12D	4C	26.5	250	B	S	8	HS750	6.50
MHB12D	4C	96	2.7K	A	S	8	HS799	6.50
MHB12D	4C	115	5K	B	S	8	HS801	6.50
MHBU12D	4C	26.5	250	B	R	1	HS1061A	6.50
MHD12D	4C	26.5	300	A	S	5	HS880A	6.50
MHJ12D	4C	26.5	250	A	R	8	HS793A	6.50
MHJF12D	4C	26.5	250	A	S	6	HS893A	6.50
MHJLO12D	4C	26.5/48	650	A	P	7	HS729A	7.00
MHJLO12D	4C	115	5K	B	P	7	HS781A	7.00
MHK12D	4C	26.5	300	A	S	10	HS772	6.50
MH18D	6C	26.5	240	A	S	2	HS742	7.50
MHB18D	6C	26.5	200	B	S	2	HS731	8.00
MHB18D	6C	96	3700	B	S	2	HS882A	8.50
MHBU18D	6C	26.5	200	B	R	7	HS751A	8.00
MHBU18D	6C	26.5	200	B	S	7	HS872A	8.00
MHBUO18D	6C	26.5	200	B	P	3	HS704	8.00
MHD18D	6C	26.5	200	B	S	5	HS716A	8.00
MHJ18D	6C	26.5	200	A	S	18	HS752A	8.50
MHJ18D	6C	96	9150	A	S	18	HS707A	8.50
MHJT18D	6C	26.5	200	A	S	11	HS753	8.50
MHYU18D	6C	26.5	200	A	R	7	HS881A	8.50
RSH6D	2C	2.5 ma.	8K	B	S	1	HS884A	8.50
RSH6D	2C	3 ma.	10K	B	S	1	HS792A	8.50
RSH6D	2C	7 am.	10K	B	S	1	HS798A	8.50
RSH6D	2C	2 ma.	14.75K	B	S	1	HS883A	8.50

* A = -55° + 85°
B = -65° + 125°

** P = plug-in
S = hook type solder

SUBMINIATURE G.P. RELAYS ALLIED

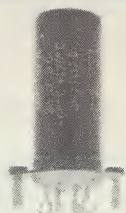
ALLIED TYPE

Allied Type	Contacts	Nom. VDC	Ohms	* Data Temp.	** Terms	Mtg.	St. No.	PRICE
MHX23	4C	26.5	300	A	S	3	HS879	\$5.00
MHX27	6C	26.5	200	B	S	5	HS716	6.00
MHX57	2C	26.5	400	A	S	1	HS732	4.50
MHX58	4C	26.5	250	B	R	1	HS1061	5.00
MHX61	2C	26.5	325	B	S	1	HS925	4.50
MHX65	4C	26.5	300	A	S	5	HS880	5.00
MHX88	6C	26.5	240	A	S	8	HS736	5.00
MH120	2C	26.5	325	B	S	5	HS802	4.50
MHX126	6C	96	3700	B	S	2	HS878	6.00
MHX175	6C	26.5	240	A	S	9	HS800	5.00
MHX197	2C	26.5	325	B	S	2	HS877	4.50
MHX239	2C	26.5	400	A	S	15	HS789	5.00
MHX244	2C	26.5	400	A	S	1	HS785	4.50
MHX2018	2C	26.5	325	B	S	1	HS873	4.50
MHX2032	2C	26.5	325	B	S	1	HS876	4.50
MHX2051	2C	26.5	325	B	S	1	HS727	4.50
MHX2136	2C	26.5	400	A	S	1	HS719	4.50
MHX2165	2C	26.5	400	A	P	4	HS1000	5.00
MHX2201	2C	26.5	325	B	S	1	HS791	4.50
MHX2226	2C	115	6K	B	P	4	HS	5.00
MHX2231	2C	96	3700	B	S	1	HS796	4.50
MHX4014	4C	26.5	250	B	S	3	HS866	5.00
MHX4016	4C	26.5	250	B	S	3	HS790	5.00
MHX4104	4C	26.5	250	B	P	16	HS794	4.00
MHX4108	4C	26.5	250	B	P	16	HS785	4.00
MHX4126	4C	26.5	250	B	S	1	HS986	5.00
MHX6009	6C	26.5	200	B	S	18	HS856	6.00
MHX6015	6C	26.5	200	B	S	7	HS751	6.50
MHX6021	6C	26.5	240	A	S	8	HS735	5.00
MHX6083	6C	96	3700	B	S	18	HS702	6.00
MHX6128	6C	26.5	200	B	R	7	HS872	6.50
MHJX4020	4C	26.5/48	650	A	P	19	HS729	5.50
MHJX4024	4C	26.5	250	B	S	6	HS893	5.00
MHJX4034	4C	26.5	250	B	R	18	HS793	5.00
MHJX4048	4C	115	5K	B	P	19	HS781	5.50
MHJX6019	6C	26.5	200	B	S	18	HS895	6.00
MHJX6034	6C	96	9150	B	S	18	HS707	6.00
MHJX6070	6C	26.5	200	A	S	17	HS797	5.00
MHYX1	6C	26.5	200	A	R	7	HS982	6.50
MHYX4021	6C	26.5	200	A	R	7	HS881	6.50
RSHX27	2C	2 ma.	14750	B	S	1	HS883	6.50
RSHX60	2C	2.5 ma.	8000	B	S	1	HS884	6.50
RSHX64	2C	3 ma.	10000	B	S	1	HS792	6.50
RSHX91	2C	7 ma.	10000	B	S	1	HS798	6.50

* See page 75
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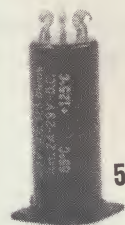
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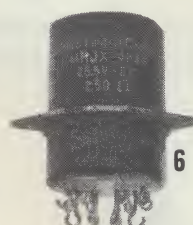
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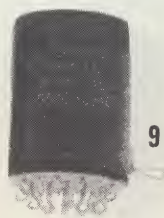
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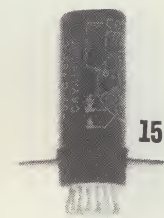
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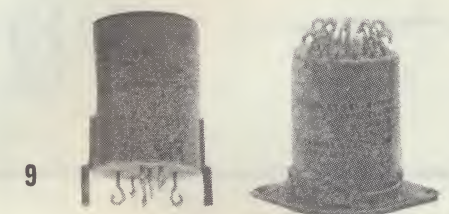
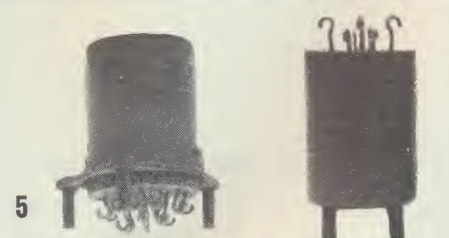
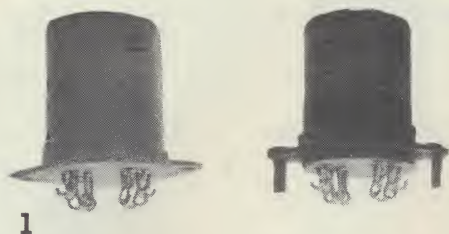
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19



FILTERS

Filters Type	Contacts	Nom. VDC	Ohms	* Data Temp.	** Terms	Mtg.	St. No.	Price
8SC6A	2C	8.2	65	B	S	7	HS813	\$6.00
T26SB6Z	2C	26.5	300	B	S	9	HS740	6.00
M26FC6A	2C	26.5	325	B	R	4	HS733	6.00
TM26FC6SB	2C	26.5	325	B	R	4	HS1046	6.50
26SFP6	2C	26.5	420	B	P	3	HS739	6.00
14SM12SA	4C	14	120		S	2	HS701	7.50
26SA12A	4C	26.5	250	B	S	2	HS721	6.50
V26RB12A	4C	26.5	240	B	S	1	HS1048	6.50
26SLB12A	4C	26.5	250	B	S	5	HS1051	6.50
26SC12	4C	26.5	250	B		7	HS722	6.50
26SM12F	4C	26.5	250	B	S	2	HS1049	6.50
26SM12R	4C	26.5	250		S	2	HS762	6.50
26SM12SA	4C	26.5	250	B	S	2	HS1059	7.50
26SP12	4C	26.5	250	A	P	3	HS724	6.50
26SRC12B	4C	26.5	250	B	R	1	HS1047	6.50
26SY12	4C	26.5	250	B	S	10	HS1053	6.50
T26SB18Z	6C	26.5	150	A	S	9	HS773	7.50
26SE18S	6C	26.5	200	B	S	1	HS744	8.50
26SEC18A	6C	26.5	205	B	S	1	HS723	7.50
26SF18S	6C ¹	26.5	200	A	S	3	HS718	8.50
T26SK18SZ	6C	26.5	150	B	S	10	HS806	8.50
T26SK18Z	6C	26.5	150	A	S	10	HS803	7.50

1-Low Level

STRUTHERS-DUNN

Struthers Dunn Type	Cont.	Nom. VDC	Ohms	** Terms.	Fig.	Stock No.	Price
FC-6-234	2A,1B	120	10K	S	11	HS901	\$6.50
FC-6R-101	4C	26.5	200	R	12	HS814	7.00
FC-4-102	4C	26.5	250	S	11	HS902	7.00
220XD115	4C	26.5	225	R	12	HS745	7.00
220XD310	4C	26.5	134	R	12	GS717	7.00
FC6-107	6C	26.5	200	P	14	HS804	8.50
FC6-156	6C	28	200	P	14	HS	8.50
FC-6-137B	6C	26.5	200	S	13	HS894	8.50
FC-6R-100	6C	26.5	200	R	12	HS815	8.50
FC-6R-107	6C	26.5	525	R	12	HS808	8.50
FC-6R-108	6C	26.5	200	R	12	HS816	8.50
203W2	6C	26.5	225	R	11	HS904	7.00
220XF115	6C	26.5	225		12	HS746	7.00

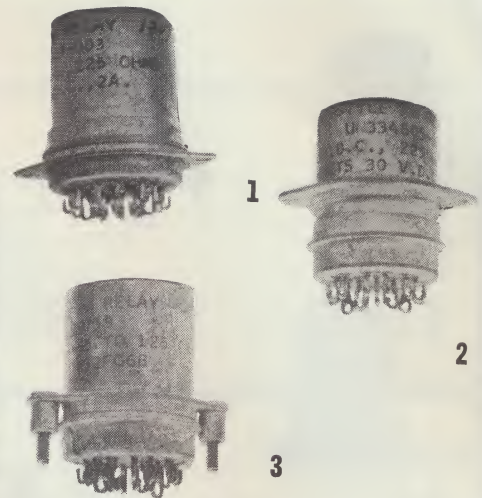
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* See bottom of page 75



UNION SWITCH AND SIGNAL

Union Switch and Signal Part	Cont. Circ.	Nom. VDC	Ohms	* Data Temp.	** Terms	Fig.	Stock No.	Price
UN 334605-003	6C	26.5	225		S	3	HS743	\$6.00
UN 334607-003	6C	26.5	225		S	1	HS905	6.00
UN 334607-006	6C	26.5	225		S	1	HS906	6.00
UN 329734-020	6C	26.5	225	B	S	1	HS859	7.00
UN 329739	6C	12	60	B	S	2	HS863	3.00
UN 312586	6C	26.5	225	B	S	2	HS852	7.00
UN 312586-0001	6C	26.5	225	B	S	2	HS712	7.00
UN 312586-014	6C	26.5	225	B	S	2	HS747	7.00
UN 312586-010	6C	26.5	225	B	S	2	HS741	7.00
UN 342026-005	4C	26.5	225	B	S	3	HS907	7.00
UN 345613-007	6C	26.5	400	A	S	1	HS908	6.00



COUCH

COUCH Part No.	Cont. Circ.	Nom. VDC	Ohms	* Data Temp.	** Terms	Fig.	Stock No.	Price
X147	2C	12	75	A	R	4	HS770	\$4.00
2A37-B	2C ¹	26.5	475	A	R	4	HS749	5.00
2B44-B	2C	150	10K	A	R	4	HS755	4.00
4C36-A	4C	26.5	300	A	R	6	HS771	5.00
4A36-B	4C ¹	26.5	300	A	R	4	HS774	6.00
4A37-B	4C*	35	475	A	R	4	HS748	6.00
X208	4C*	26.5	300		R	5	HS817	6.00

¹ dry circ. cont.



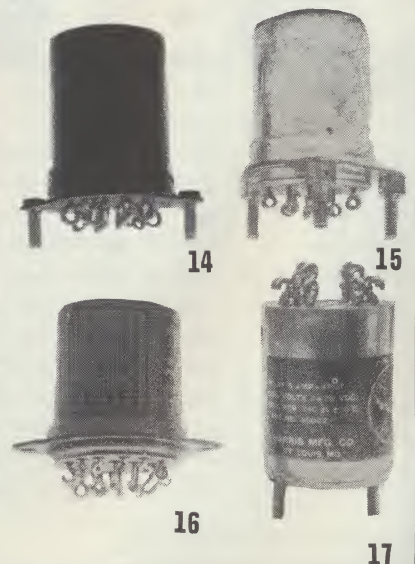
MISCELLANEOUS

MISCELLANEOUS Part No.	Cont. Circ.	Nom. VDC	Ohms	* Data Temp.	** Terms.	Fig.	Stock No.	Price
Hi G HG-2SM-126	2C°	26.5	325		S	11	HS708	\$5.00
Hi G HG-2SMA-917-1	2C	26.5	325		S	12	HS715	4.00
Phil-Trol DC-32	2C	26.5	325		S	11	HS787	4.00
Price 506B-46	2C	26.5	325		S	13	HS766	4.00
Harris Mfg. 350021	4C	26.5	240	A	S	17	HS783	5.00
USRC S309M	4C	26.5	225			15	HS720	5.00
Electro-Tec 1000-9	6C	26.5	200	S	S	12	HS754	6.00
Electro-Tec 2001-13	6C	26.5	200			12	HS792	6.00
H. G. 4SL-1773-1	6C ¹	96V	3700	A	R	14	HS769	7.00
Price 300R047	6C	26.5	239		S	16	HS1032	6.00
Price 520L-38	6C	96V	3700	A	S	14	HS784	6.00
USRC S308	6C	26.5	225		S	16	HS730	6.00
Deltronic DC-36F7	6C	26.5	200		S	16	HS737	6.00

* See bottom of page 75

¹ dry circ. cont.

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HART



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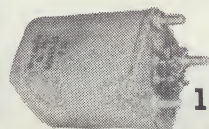
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Hart Type	Contacts	Nom. VDC	Ohms	Terms.	Mtg.	Stock No.	Price
R080B3T-9C	4C	10-20 ma	80	S	3	HS315A	\$5.50
R101P	4C	26.5		P	1	H866	5.50
R115AIT-1GDM	4C	26.5	150	S	1	HS975	5.50
R115BIT-1	4C	26.5	150	S	1	H328	5.50
R115BIT-1A	4C	26.5	150	S	1	HS874	5.50
R115BIT-1B	4C	26.5	150	S	1	HS872	5.50
R115BIT-1C	4C	26.5	150	S	1	HS809	5.50
R115B3T-1C	4C	26.5	150	S	1	H328A	5.50
R115CIP-1P	4C	26.5	150	S	1	HS709	5.50
R120BIP-1C	4C	26.5	200	P	1	H358	5.50
R120BIT-C	4C	26.5	200	S	1	HS855	5.50
R120BIT-31C	4C	26.5	200	S	4	H357	5.50
R150B3P-1C	4C	26.5	500	P	1	HS857	5.50
R150B3T-4C	4C	26.5	500	S	5	HS998	5.50
R150B3T-9C	4C	26.5	500	S	3	HS810	6.00
R220B3T-1	4C	26.5	2000	S	1	HS1030	6.00
R250C3T-1	4C	50	5K	S	1	H338	6.00
R310B3P-1C	4C	6 ma	10K	P	1	HS854	6.00
R310BIT-1C	4C	10	10K	S	1	HS875	6.00
R310B3T-1	4C	10	10K	S	1	HS853	5.50
S310B3P-1C	4C	26.5	300	P	1	H790	6.00
R315B3T-1	4C	5	15K	S	1	H1112	6.00
R318BIT-1	4C	300	18K	S	1	HS861	6.00
R318B3T-1	4C	10 ma	18K	S	1	HS860	6.00
R340B3T-1	4C	3 ma.	40K	S	1	HS898	6.00
R350B3T-1	4C	6½ ma	50K	S	1	HS768	6.00

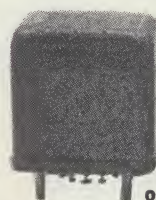
SEALED POWER RELAYS



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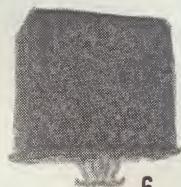
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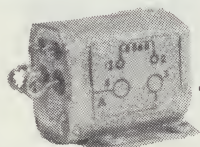
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Mfr. & No.	Circ.	Amps.	Volts	Ohms	Dimensions (in inches)				Fig.	Stock No.	Price
					D	W	H	L			
Allied BOHRX86	1	15	115 VAC	445		2-1/2	2-3/4	2-1/2	1	H310	\$3.50
Allied BOHX72	2C	15	24 VDC	445	2-1/8		3		2	H383	3.00
Allied BOYHX-15	1X	10	24 VDC	900	2-3/4		2-1/16		3	H309	3.00
Allied CNASH13A	1X	50	115 VAC	145		2-5/8	3-1/4	2-1/2	4	H315	3.50
Allied POH15-15D	2Z	15	24 VDC	230		2-5/8	2-3/4	2-1/2	5	H311	3.00
C.P. Clare RP3098G1	1X	10	24 VDC	300		2-3/4	2-3/8	1-5/8	6	H397	3.00
Essex 112814-00	1X	15	28 VDC	220		2-11/16	2-1/8	7/8	7	H319	3.00
Leach 9031SS	3C	10	28 VDC	150		2	2-1/8	1-5/8	8	H385	3.50
Leach 9087	4C	10	115 V400cy			2	4	2-1/3	10	H388	3.00
Leach 9120-73V	1X	50	28 VDC			2-5/8	2-3/4	1-3/4	11	H386	3.50
Leach 9254-1	2C	10	28 VDC			1-5/8	2-1/2	2-1/4	10	H387	2.50
Price 2109-9HS	3C	15	115 VAC	150		1-7/8	2-3/16	1-7/8	9	H384	4.00

1Momentary Break

LEACH BALANCED ARMATURE TYPES

The latest compact balanced armature types designed to meet MIL-R-6106C, A5, A8, B8, minimum current tests applicable MIL-R-5757B, Class A and B.



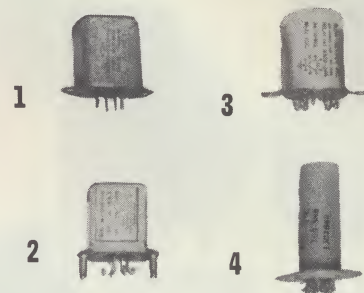
Part No.	Circ.	Amps	Volts	Base	Mounting	Stock No.	Price
9220	4C	5	28 VDC	Lugs	Bottom studs	HS725	\$ 2.50
9220-51S	4C	5	28 VDC	Lugs	Bottom bracket	HS726	2.50
9220-92R	4C	5	28 VDC	Plug-in	Bottom bracket*	HS1054	2.50
9224-5534	4C	10	115V 60 cy	Lugs	Side bracket	H300	\$10.00
9224-6128	3C	5	Dual 28VDC	Lugs	Bottom studs	H302	6.00
9226-4439	6C	5	115 VAC	Plug-in	Bottom bracket	H1116	12.50
9226-7274	6C	5	28 VDC	Lugs	Bottom studs	H1115	12.50
9229-7272	2C	5	28 VDC	Lugs	Bottom bracket	H1117	6.00
9230	4C	10	28 VDC	Lugs	Bottom studs	HS756	6.00
9230-3594	4C	10	28 VDC	Lugs	Bottom studs	HS757	6.00
9230-3651	2C†	10	28 VDC	Lugs	Bottom studs	H322	6.00

* Gold † 100 millisec. delay drop-out

SUBMINIATURE SEALED RELAYS

Mfr. & No.	Circ.	Volts	Ohms	Fig.	Stock No.	Price
Elgin 5635-500	1C*	24 VDC	500	1	HS765	\$2.50
Elgin 7115-513	2A*	24 VDC	513	1	HS713	2.50
Elgin 8320-345	2C	24 VDC	345	2	HS711	2.50
Elgin 8110-300	2C†	26.5	300	2	HS811	2.50
Elgin 8110-345	2C†	26.5	340	2	HS812	2.50
Elgin MK2C24VDSIA	2C	24 VDC	500	3	HS704	2.50
Elgin MM2C26.5VDSIA	2C	26.5 VDC	500	3	HS705	2.50
Price Electric 7093HS	2C	24 VDC	900	4	HS714	2.50

*7 pin miniature plug-in † 9 pin



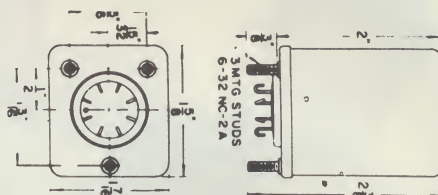
MINIATURE TYPES

Relays listed below are hermetically sealed miniatures in the standardized can. Dimensions and mounting stud locations are indicated. Contacts are rated at 2 amps..at 110VAC or 29VDC non-inductive.

Mfr. & No.	Circ.	Volts	Ohms	Stock No.	Price
Advance A9-1	2C	12 VDC	50	H860	\$2.00
Advance TC6D110-A3	2C	110 VDC	8000	H374	2.00
Allied A8744-1A	4C†	28 VDC		H375	2.50

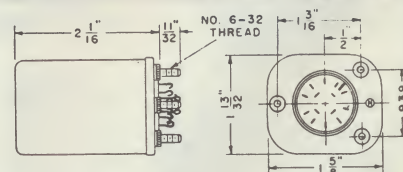
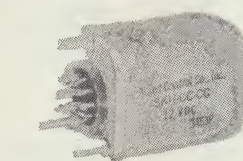
Above relays rated at 2 amps. unless otherwise noted.

† 3 amps.



Mfr. & No.	Circ.	Volts	Ohms	Stock No.	Price
Allied SKH-CC-CC	4C	12 VDC	111	H400	\$3.00
Allied SKHW-CC-CC	4C	24 VDC	425	H372	3.00
Allied SKHX-3A	4C	24 VDC	425	H368	3.00
Allied SKHX-49	2C	24 VDC	425	H873	2.00
Allied SKHX-750	4C*	24 VDC	425	H341	3.50
Auto. Elect. H87725-1	4C	24 VDC	250	HS700	3.00
C.P. Clare SK44052	4C	150 VDC	14,000	H335	3.00
C.P. Clare SN40001	4C	24 VDC	450	HS368	3.00
C.P. Clare SN42006	1A,2B	6.5 ma. DC	6,500	H364	2.00
C.P. Clare SN44070	4A	24 VDC	250	H366	2.50
Comar C3863	2A	24 VDC	250	H359	2.00

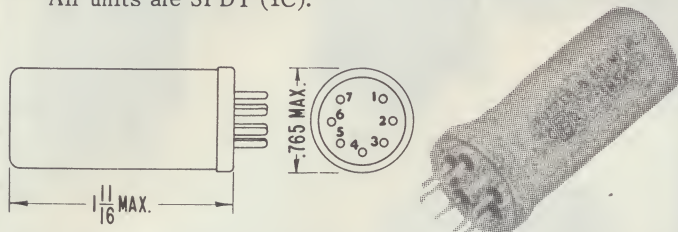
* Gold



Mfr. & No.	Circ.	Volts	Ohms	Stock No.	Price
Price 5703-32HSX	1C	24 VDC	450	H360	\$2.00
Price 5724-1HSX	4C	24 VDC	450	H370	2.50
Price 5724-58HSX	4C	12 VDC	100	HS1042	3.00
Price 5765-4HSX	1A,1B,1C		9K	H365	2.00
Price 5797-16HSX	2C	24 VDC	450	HS1050	2.00

MINIATURE CYLINDRICAL PLUG-IN RELAYS

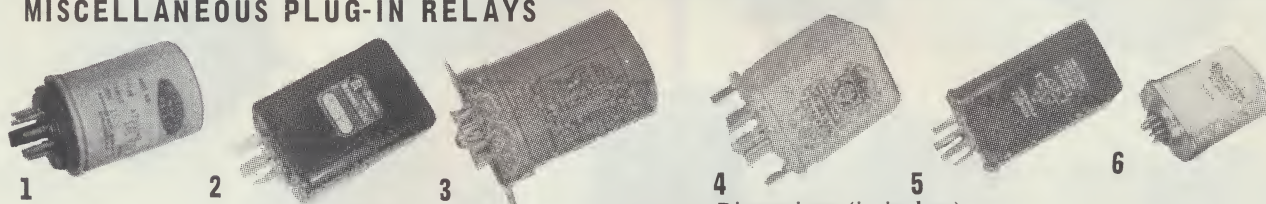
Compact, lightweight hermetically sealed units with a seven-pin miniature plug-in base. (Average size $\frac{3}{4}$ " D. x $1\frac{3}{4}$ " L.; average weight 1 oz.) Contact ratings $\frac{1}{2}$ amp. at 28VDC or $\frac{1}{4}$ amp. at 115VDC for the P & B SM types and 2 amps. for the P & B PW types. All units are SPDT (1C).



Ohms	Oper. ma. DC	Nom. Coil VDC	Mfr. & No.	Stock No.	Price
1.5	300	.45	P & B SM1088-3	HS776	\$3.50
625		26.5	P & B SM1141	HS775	3.50
2.5K*	3.5		P & B PW5027	HS1008	3.50
5K	3.5	36	P & B SM1156	HS777	3.50
5K	3.5	36	Teradio A1254	HS980	3.50
8K	3	28	P & B SM5LS	HS780	3.50
8K	3	28	P & B SM1154	HS1010	3.50
8K	2.5	24	P & B PW5054	HS1009	3.50
8K	6.5	40	P & B PW5112	HS779	3.50
8K	2.5	24	Teradio B1334	HS981	3.50
10K	3.5	40	P & B PW5443	HS778	3.50

*Solder terminal bottom flange mounting

MISCELLANEOUS PLUG-IN RELAYS



Mfr. & No.	Circ.	Volts	Ohms	Base	D	W	H	L	Fig.	Stock No.	Price
Advance A 8911-14	2C†	8.5 ma.	10K	Octal	1-15/16		2-9/16		1	H1301	\$2.50
Allied SKHX462	2C	24 VDC	400	Octal		1-7/8	2-5/8	1-5/16	2	H883	2.50
C.P. Clare AP5771G2	1A,4B	6 VDC	20	20 Pin	2		3-1/16		3	H460	2.50
Decohm D1301-3A4-S8M	3A	24 VDC	300	Octal		1-9/16	2	1-3/8	4	H382	2.50
Magnecraft 22AHPX5	1A,1B	115 VAC	500	Octal		1-5/8	2-5/8	1-13/32	5	H380	3.00
P & B KR5AE	1C	6VAC		Octal		1-1/2	2"	1-5/16	5	H301	2.50
P & B MH1760-1	2C	24 VDC	400	Octal		1-7/8	2-5/8	1-5/16	2	HS900	2.50
P & B MH1769	2C	28 VDC	400	Octal		1-7/8	2-5/8	1-5/16	2	HS1045	2.50
P & B MH4322-1	2C†	24 VDC	350	9 Pin*		1-11/16	2-7/32	1-1/32	6	H378	2.50

All rated at 2 amps. unless noted otherwise.

† 5 amps.

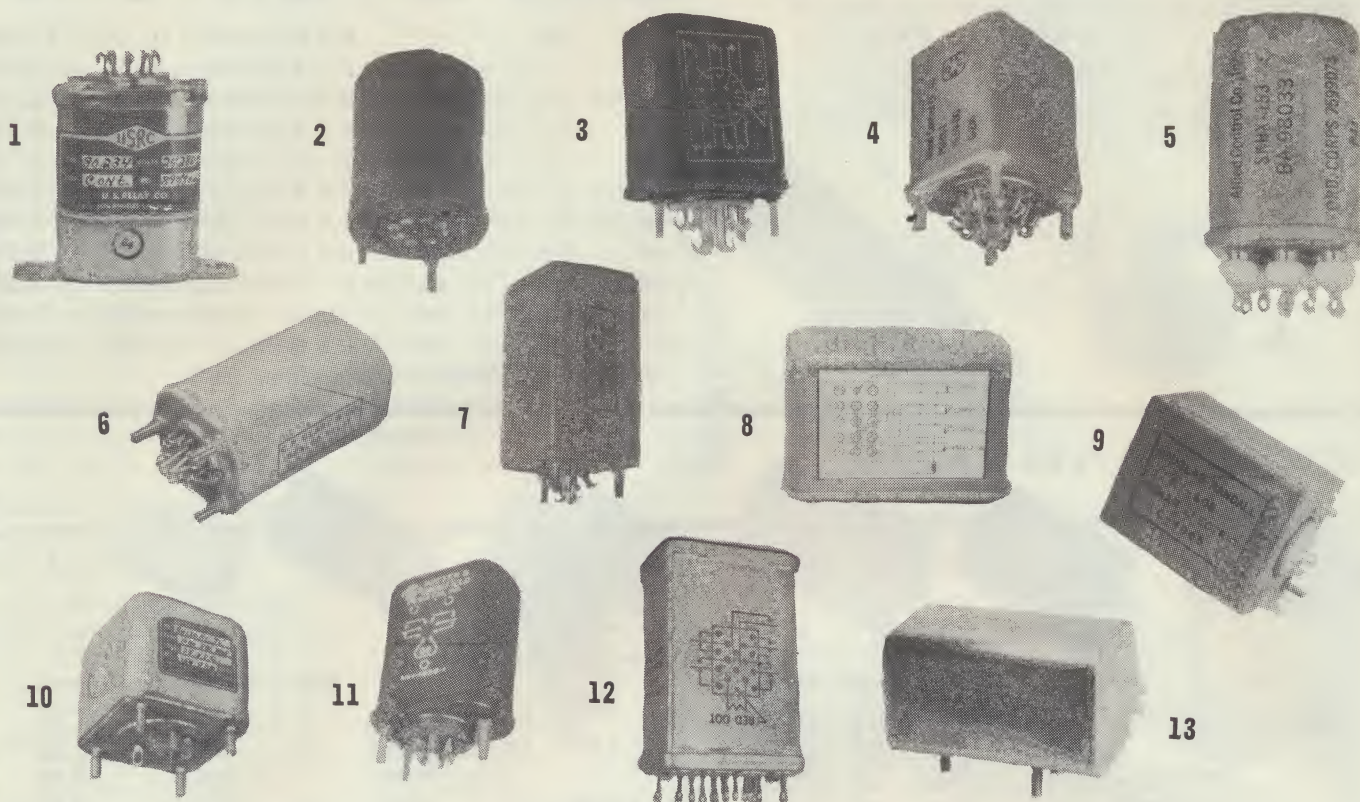
* Miniature

14 PIN PLUG-IN SEALED RELAYS



Mfr. & No.	Circ.	Volts	Ohms	Dimensions (in inches)	Fig.	Stock No.	Price
				W H L			
Decohm DA4063	4C†	24 VDC	300	1-5/8 2 1-7/16	1	H1118	\$2.00
Magnecraft 11HSX-183	4C	26.5 VDC	300		2	H874	2.00
P & B MH1404-1	4C	24 VDC	300	1-5/8 2 15/16	3	H905	2.00
P & B MH1404-3	4C	24 VDC	250	1-5/8 2 15/16	3	H907	2.00
P & B MH1404-4	4C	24 VDC	250	1-5/8 2 15/16	3	H906	2.00
P & B MH1404-5	4C	24 VDC	250	1-5/8 2 15/16	3	H908	2.00
Price 5424-22HP	4C	24 VDC	280	1-1/4 1-1/2 3/4	4	H470	2.00
Price 5524-7HP	4C	24 VDC	280	1-1/4 1-1/2 3/4	4	H472	2.00
Price 5524-5HS	4C	24 VDC	280	1-1/4 1-1/2 3/4	4	HS767	2.00

HERMETICALLY SEALED SOLDER LUG HEADER TYPES



Mfr. & No.	Circ.	Volts	Ohms	Dimensions (in inches)				Fig.	Stock No.	Price
				D	W	H	L			
Advance G8703-1	2C†	28 VDC	890*		1-5/8	2-1/16	1-13/16	1	H1225	\$1.50
Raytheon U11607	2C	110 VDC	7500	1-7/8		2-1/2		2	HS1058	1.50
Advance TQ4C27VD-S7B	4C	26.5 VDC	300		1-5/16	1-5/8	15/16	3	HS706	2.00
Allied PBHX-1	4C	24 VDC	185		1-1/2	2-1/8	1-1/8	4	H312	2.00
Allied SKHX-153	2C**	28 VDC	425		1-5/8	2-1/16	1-13/32	5	H1352	1.50
C.P. Clare RP3716G11	1A, 1B, 2C ††	24 VDC	350		1-5/8	2-3/4	1-3/8	6	H871	1.50
C.P. Clare RP3716G12	3A, 1C	115 VDC	10K		1-5/8	2-5/8	1-13/32	1	H398	2.00
C.P. Clare RP3716G21	4C	12/24 VDC	150/300		1-5/8	2-3/4	1-3/8	7	H464	2.00
C.P. Clare RP3717G125	1A, 1B	Series	2.4		1-5/8	2-3/4	1-3/8	7	H465	1.50
C.P. Clare RP3717G131	3A	19 ma. max.	11,300		1-5/8	2-5/8	1-13/32	7	H451	1.50
C.P. Clare SC6003	3A, 1B	24 VDC	750		4-1/2	3	1-3/4	8	H396	1.50
Comar C3849	2C†	115 VAC	—	2		2-1/2	1-1/2	9	H394	2.00
Comar C4065	2A†	3 VDC	135	2		2-1/2	1-1/2	9	H393	1.50
Hetherington RH130A1-75	1D	28 VDC	150		1-7/8	1-5/8	1-7/8	10	HS872	1.50
Magnecraft 33HSX-17A	4C	26.5 VDC	330		1-5/16	1-5/8	15/16	3	H390	2.00
P & B MH1939-1	2C	24 VDC	250		1-11/16	2-7/32	1-1/32	11	H376	1.50
P & B MH7541	4C	115 VAC	—		1-11/16	2-7/32	1-1/32	11	H304	6.00
Price 5410-4HS	1A, 1B	26.5 VDC	445		1-5/16	1-5/8	15/16	3	H900	1.50
Price 5510-1HS	1A, 1B	26.5 VDC	445		1-5/16	1-5/8	15/16	3	H901	1.50
RBM 22300-22	4C	26.5 VDC	250		1-5/16	1-5/8	15/16	3	HS759	1.50
RBM 22300-23	1B	26.5 VDC	450		1-5/16	1-5/8	15/16	3	HS758	1.50
RBM 22300-47	1A, 2B, 2C	26.5 VDC	120		1-5/16	1-5/8	15/16	3	HS760	1.50
Struthers Dunn 182ADX57	1A, 4C†	24 VDC	260		2-1/8	3-3/8	1-1/2	12	H314	1.50
Wheelock RX1039-4	1A	8 ma. DC	800		3-5/8	1-7/8	1-7/8	13	H307	1.50

* 890 ohm hold coil, 80 ohm pull-in coil

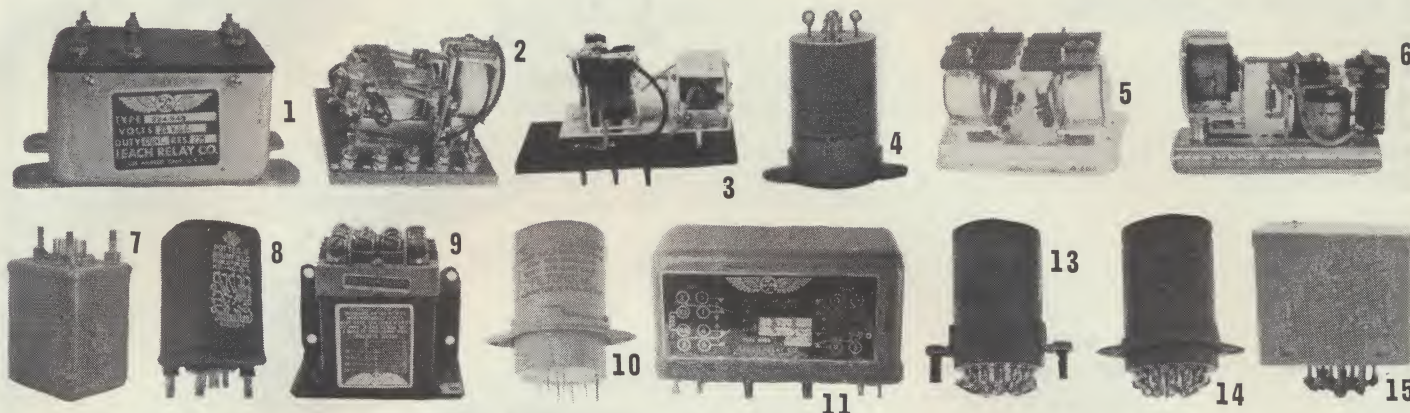
** High voltage contacts

† 5 amps. (all others are 2 amps.)

†† Slow operate

• Less studs

LATCHING RELAYS



NOMINAL COIL DATA

Circ.	Amps.	OPER.		RESET		Fig.	Mfr. & No.	Stock No.	Price
		Volts	Ohms	Volts	Ohms				
1A, 1B	15	115V, 60 cy.	400	155V, 60 cy.	400	3	Ohmite DOSLEX15	LR125	\$6.00
1C	5	24VDC	235	24VDC	235	1	Leach 224-943	LR111	6.00
1C	5	24VDC	235	24VDC	235	1	Leach 9023	LR105	6.00
1W, 1C*	5	24VDC	24	24VDC	24	2	Leach 2419-480	LR104	6.00
2C	2	24VDC	400	24VDC	275	4	Filtors LL26J6	LR119	12.00
2C	15	115V, 60 cy.		24VDC	280	15	Price 2759-10D	LR127	6.50
2C	5	115V, 60 cy.		115V, 60 cy.		5	Omega LR2C	LR120	5.50
2C	5	220V, 60 cy.		220V, 60 cy.		6	P & B LK1155	LR106	5.50
3C, 1A	2	24VDC	300	24VDC	300	7	Aemco 117-2747	LR109	6.50
3C, 1A	2	24VDC	300	24VDC	300	8	P & B KE4010-5	LR115	6.50
3C	10	24VDC	200	24VDC	300	9	Leach 9225-4582	LR102	6.00
4C	2	24VDC	300	24VDC	275	10	Filtors LL26AAK12N	LR113	12.00
4C**	2	24VDC	300	24VDC	275	10	Filtors LL26AAK12F	LR117	10.00
4C	2	24VDC	300	24VDC	275	10	Filtors LL26AAK12	LR118	12.00
4C	10	28VDC	250	28VDC	250	11	Leach 9088	LR110	9.00
4C	5	115V, 60 cy.		115V, 60 cy.		5	Omega LR4C	LR120A	6.50
6C	2	24VDC	200	24VDC	375	13	Filtors L26A18	LR122	16.00
6C	2	24VDC	180	24VDC	245	14	Filtors LL26R18	LR123	16.00
6C	11	24VDC	180	24VDC	245	14	Filtors LL26R18F	LR121	16.00

LATCHING ON/OFF RELAY

■ Guardian 1R610L-C115

Midget latching relay SPDT contacts. For on/off control of positioning devices, etc. Contacts rated 5 amps. 20 ms impulse. Single coil: 115V., 60 cy. Alternate impulse return contacts to original position.

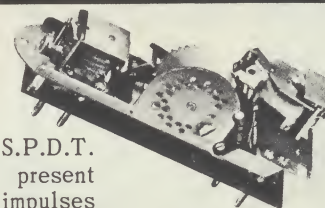
LR124



\$3.95

IMPULSE COUNTING RELAY

This unit designed to acutate a S.P.D.T. MicroSwitch after counting a present number of impulses. Number of impulses (1 to 26) can be set by placing a stop screw in predrilled holes. Coils: 115VAC., 60 cy. Reset coil circuit recycles relay.



\$8.95

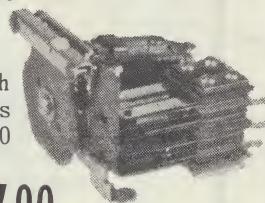
SEQUENCE RATCHET RELAY

■ Guardian 1R-M-120-115

4 PDT steppers w 3 position switch operation center position off. Contacts rated for 10 amps., 115V 60 cy. 10 steps/sec max.

LR116

\$7.00



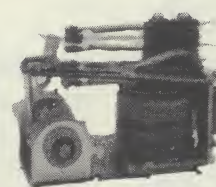
IMPULSE RATCHET RELAY

■ Guardian 670-G-115

2 PDT for on off control of electronic devices. Each step reverses contacts. Contacts rated 12.5 amps., @ 115V 60 cy. 10 steps/sec. max.

LR126

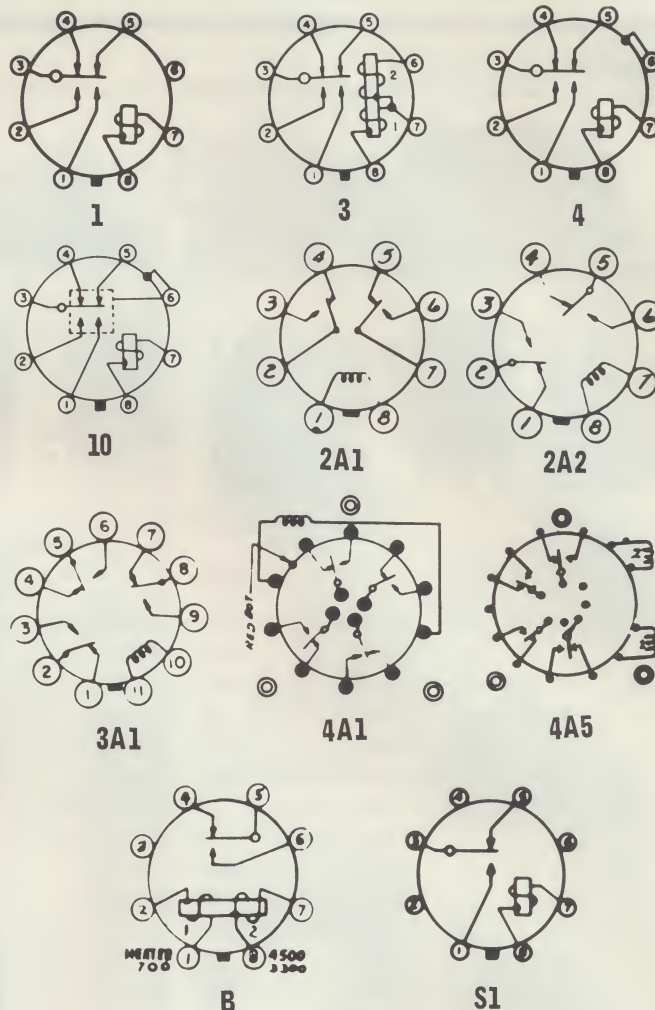
\$7.00



MERCURY-WETTED CONTACT RELAYS

A BILLION OPERATIONS

- Convenient mounting
- Environment-free
- Tamper-proof
- High sensitivity
- Maintenance-free
- No contact wear



CLARE

Part No.	Cont. Circ.	Ohms	Oper. DC Ma.	(VDC) Oper. Range min. max.	Base Fig.	Stock No.	Price
HG1002	1D	4000	8.1	35.6 89.5	1	MH121	\$7.00
HG1004	1D	700	20.2	15.4 37.4	1	MH139	7.00
HG1010	1D	700	20.2	15.4 37.4	1	MH144	7.00
HG1017	1D	4000	8.1	35.6 89.5	4	MH134	6.00
HG1019	1D	40	67.7	2.98 9.0	4	MH135	6.00
HG1023	1D	4000	8.1	35.6 89.5	1	MH152	7.00
HG1040	1D	600	18.2	12 34.7	1	MH136	7.00
HG1076	1D	2500	10.1	27.8 70.7	1	MH122	6.00
HG1077	1D	4000	8.1	35.6 89.5	1	MH123	6.00

Clare Part No.	Cont. Circ.	Ohms	Oper. DC Ma.	Base Fig.	Stock No.	Price
HGP1012	1D	700/3300	+6/+2.4	3*	MH112	\$10.00
HGP1036	1D	600	6.3V, 60cy.	10†	MH110	10.00
HGP1139	1D	600	24VDC	10	MH148	10.00
HGS1012	1D	130	5.58	S1	MH138	7.00
HGSS1001	1D	6000	1.33	S1	MH145	8.00

Clare Part No.	Cont. Circ.	Ohms	Oper. DC Ma.	(VDC) Oper. Range min. max.	Base Fig.	Stock No.	Price
HGSM1061	1D	1.8K	9.4	18.6 56		MH146	\$ 5.50
HG2A1002	2D	700	30.5	23.5 45.8	2A2	MH157	15.00
HG2A1003	2D	315	44	15.3 30.7	2A2	MH147	15.00
HG2AU1004	2D	500	34.8	19.2 38.7	2A2	MH143	15.00
HG2A1015	2D	1250	22.1	30.4 61.2	2A2	MH125	15.00
HG2A1029	2D	315	44	15.3 30.7	2A1	MH102	15.00
HG2A1030	2D	140	66.5	10.3 20.5	2A2	MH158	15.00
HG3A1004	3D	315	44	15.3 30.7	3A1	MH159	16.00
HG4B1020B	4D	390	42	18 37		MH153	17.50

ADLAKE

Part No.	Cont. Circ.	Ohms	Oper. DC Ma.	Base Fig.	Stock No.	Price
MW2617-12U	2D	500	34.8	2A2	MH142	\$12.50
MW4620-11U	4D	390	42	4A1	MH141	16.00

*Bi-stable magnetic latching

†Chopper

WESTERN ELECTRIC

Part No.	Cont. Circ.	Ohms	Oper. DC Ma.	Base Fig.	Stock No.	Price
275B	1D	4000	10.1	1	MH132	\$7.00
275D	1D	700	20	1	MH131	7.00
D171584	1D	4500	8	B	MH106	5.50
GA50143	1D	700/3300	19.5/8.1	B	MH130	5.00

MERCURY WETTED CONTACT GLASS CAPSULE



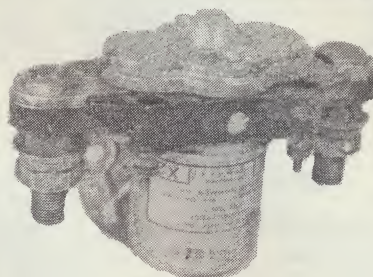
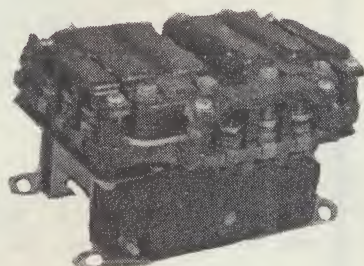
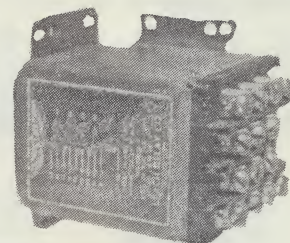
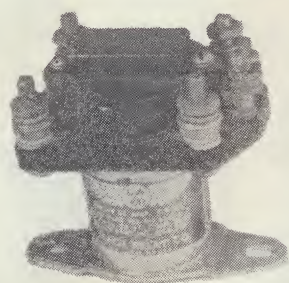
\$2.00

HIGH SPEED LONG LIFE NO BOUNCE

Twin platinum contact magnetic switch within a high pressure hydrogen atmosphere hermetically sealed in a glass capsule, with the following characteristics:

- Must operate, 190 ampere turns;
- Non operate, 124 ampere turns;
- Must release, 84 ampere turns.
- Make before break contact (1D).

MILITARY STANDARD RELAYS



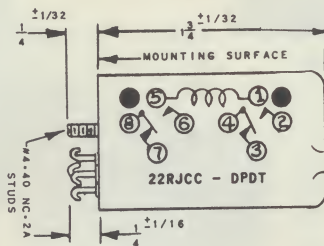
AN	Volts		Contacts		Price	A-N	Volts		Contacts		Price
	DC	Ohms	Ckt.	Amp.			DC	Ohms	Ckt.	Amp.	
3025-1	24	***	***	300	\$15.00	3362-1	24	45	2A	100	\$14.50
3025-2	24	***	***	6000	20.00	3364-1	24	8/8	2C	100	22.50
3303-1	24	200	4C	2	6.00	3364-2	24	10/10	2C	100	25.00
3304-1	24	425	4C	2	5.00	3364-3	24	10/10	2C	100	25.00
3306-1	24	235	2C	10	6.00	3370-1	24	75	1A	200	8.00
3306-2	24	235	2C	10	8.00	3370-2	24	75	1A	200	8.00
3307-1	24	235	2C	10	6.00	3371-1	24	10	1A	200	8.50
3307-2	24	190	2C	10	8.00	3371-2	24	10	1A	200	8.50
3308-1	24	135	3C	10	6.00	3380-1	24	66	1A	400	14.00
3310-1	24	135	4C	10	6.50	3380-2	24	66	1A	400	14.00
3310-2	24	90	4C	10	7.50	3381-1	24	6	1A	400	15.00
3311-1	24	235	2C	10	6.00	3381-2	24	6	1A	400	15.00
3311-2	24	235	2C	10	12.00	3391-1	24	***	***	600	25.00
3312-1	24	135	3C	10	6.00	3391-2B	24	***	***	600	25.00
3312-2	24	135	3C	10	12.00	MS24140-1	24	100	1A	50	24.00
3314-1	24	175	1C	10	5.00	MS24141-1	28	64.5	1A	100	34.00
3315-1	24	225	2C	10	5.00	MS24142-1	24	50	1A	200	40.00
3316-1	24	135	3C	10	5.00	MS24142-2	24	50	1A	200	60.00
3320-1	24	150	1A	25	4.00	MS24143-1	24	70	3A	25	50.00
3324-1	24	125	1C	20	8.00	MS24152-D1*	24	25/25	3C	25	55.00
3337-1	24	150	1C	25	12.00	MS24166D	28	110	1A	50	7.00
3339-1	24	22	3A	50	30.00	MS24168-1	24	70	3A	100	70.00
3341-1	24	13.5/85.5	3A	50	25.00	MS24182-1	28	80	1A	100	30.00
3342-2	24	13.5/85.5	3C	50	50.00	MS24184-1	28	52	1A	300	40.00
3343-1	24	9/53	3A	100	45.00	MS24199-D1	28	82.4	1C	50/25	65.00
3344-1	24	9/53	3C	100	75.00	MS24376-1	24	52	3A	50	70.00
3344-2	24	9/53	3C	100	85.00	MS25024-1	28	135	4C	10	9.00
3350-1	24	110	1A	50	5.90	MS25024-2	24	135	4C	10	11.00
3350-2	24	110	1A	50	5.90	MS25031-2	24	70/70	2C	100	25.00
3352-1	24	70.3	2A	55	9.00	MS25033-1	24	65	1A	200	30.00
3353-1	24	100	1C	50	5.90	MS25031-2	24	70/70	2C	100	30.00
3353-2	24	100	1C	50	9.50	MS25031-3	24	70/70	2C	100	30.00
3354-1	24	12/12	2C	50	15.00	MS25250-6	24	600	2C	2	8.00
						MS25269-D1	24	175	6C	5	12.00

***Reverse Current

*Mechanical Interlock

SIGMA SEALED RELAYS

SIGMA 22RJ SP AND DP SENSITIVE RELAYS AND OTHER ELECTRICALLY AND MECHANICALLY SIMILAR TYPES

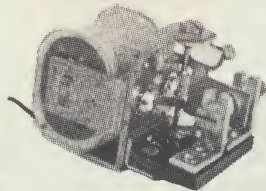


Temperature range permissible: -55° to $+100^{\circ}$ C, sensitivity: SPST, 20 mw; DPDT, 40 mw.. Maximum coil dissipation: 1.0 watt. Contacts: 2 amps. with resistive load at 28VDC or 115 VAC. Dimensions: 1" square x $1\frac{3}{4}$ " high. Solder lug terminals. Timing: operating time from 8-35 millisecs, depending on source voltage. Release time 8-35 millisecs similarly.

Mfr. & No.	Ohms	Cont.	Milli-amp. Oper.	DC Rel.	Stock No.	Price
Sigma 22RJ2CC1000HG	1K	2C	6.3	2.3	S355	\$8.00
Sigma 22RJ2CC5000G-SIL	5K	1C	2.0	0.7	S322	8.00
Iron Fireman R400-2-A-5K	5K	2C	2.8	0.7	S320	7.00
North Elect. 226BCC504E	5K	2C	2.8	0.7	S368	7.00
Sigma 22RJ2CC5000G	5K	2C	2.8	1.0	S361	8.00
Sigma 22RJ2CC8000G-SIL	8K	1C	1.6	0.55	S305	7.00
Sigma 22RJ2CC8000G-SIL	8K	2C	2.3	0.8	S307	8.00
North Elect. 226BCC145B	11K	2C	2.0	1.0	S308	7.00

SIGMA 4F SENSITIVE RELAYS

Sigma 4F relays are SPDT with balanced armature, suitable for a wide range of adjustments from 10-200 milliwatts. Contact rating: 2 amps. Operate time: approx. 14 millisecs; release: 2 millisecs. Listings below are for 20 milliwatt adjustments. More or less sensitive adjustments can be obtained at an additional cost of 25 cents each.



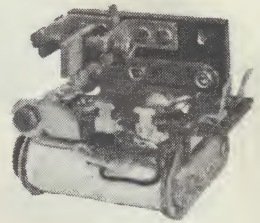
Sigma No.	Ohms	Milliamps. Oper.	DC Rel.	Stock No.	Price
4F 2000S	2000	3.2	1.5	S414A	\$4.75
4F 2500S	2500	3.0	1.2	S318A	4.50
4F 8000S	8000	1.6	0.75	S417A	4.50
4F 10000S	10000	1.4	0.65	S319A	4.50
4F 12000S	12000	1.3	0.6	S460A	5.00

SIGMA 4RJ SENSITIVE RELAYS

4RJ 2000S-SIL	2000	3.2	1.5	S414	\$7.50
4RJ 2500S-SIL	2500	3.0	1.2	S318	6.00
4RJ 8000S-SIL	8000	1.6	0.75	S417	7.75
4RJ 10000S-SIL	10000	1.4	0.65	S319	6.00

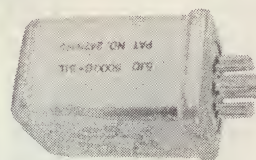
SIGMA 5F SENSITIVE RELAYS

Sigma 5F, DPDT relays with a balanced armature, are suited for a wide range of sensitive adjustments from 1-200 milliwatts. Contact ratings: 2 amps. for 10 milliwatt adjustments. Operate time: approx. 14 millisecs; release: 2 millisecs. Listings below are for 10 milliwatt adjustments. More sensitive or less sensitive adjustments can be obtained at an additional cost of 25 cents each.

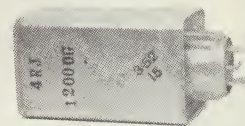


Sigma Part No.	Ohms	Oper. (Ma. DC)	Release (Ma. DC)	Stock No.	Price
5F 1000G	1000	3.2	1.2	S360A	\$6.00
5F 1500G	1500	2.8	1.0	S409	6.00
5F 2000G	2000	2.4	0.8	S363A	6.00
5F 2500G	2500	2.0	0.8	S411	6.00
5F 5000G	5000	1.4	0.5	S310A	6.00
5F 10000G	10000	1.0	0.4	S315A	6.00
5F 16000G	16000	0.8	0.3	S312A	6.00

SIGMA 5RJ & 5JO SENSITIVE RELAYS



5JO



5RJ

Part No.	Ohms	Oper. (Ma. DC)	Release (Ma. DC)	Stock No.	Price
5JO 1000G	1000	3.2	1.2	S360	\$8.00
5JO 2000G	2000	2.4	0.8	S401	8.00
5JO 2500G	2500	2.0	0.8	S402	8.00
5JO 5000G	5000	1.4	0.5	S310	8.00
5JO 10000G	10000	1.0	0.4	S450	8.50
5JO 16000S	16000	0.8	0.3	S312	8.50
5RJ 1000G	1000	3.2	1.2	S403	8.00
5RJ 1500G	1500	2.8	1.0	S404	8.00
5RJ 2000G	2000	2.4	0.8	S363	8.00
5RJ 2500G	2500	2.0	0.8	S451	8.00
5RJ 5000G	5000	1.4	0.5	S356	8.50
5RJ 6800LS	6800	—	—	S314	8.50
5RJ 10000G	10000	1.0	0.4	S315	8.50
5RJ 16000G	10000	0.8	0.3	S316	8.50

SIGMA 41F SENSITIVE RELAYS

The 41F relay is a less expensive version of the Sigma relay for adjustments in the 40-400 milliwatt range. Listings below are for the 200 milliwatt range. More sensitive adjustments are available at an additional cost of 25 cents each.



Sigma No.	Ohms	Milliamps. DC	Stock No.	Price
41F 1000G	1000	14	S304A	\$2.50
41F 2500G	2500	9	S470A	3.00
41F 5000G	5000	6.5	S317A	2.50
41F 8000SD	8000	2.3	S321	2.50
41F 10000S	10000	2.0	S310A	2.50

SIGMA 42F SENSITIVE RELAYS

42F 5G	5		S319A	\$3.00
42F 5000S	5000	4.5	S357	3.00

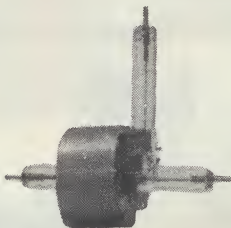
SIGMA 41JO & 41RJ & 41RO 42JO & 42RO SENSITIVE RELAYS

41JO 1000G	1000	14.0	S304	\$5.50
41RJ 2500G	2500	9.0	S470	5.50
41RJ 5000SD	5000	3.0	S317	5.50
41RO 5000G	5000	6.5	S358	5.50
41RO 10000S	10000	2.0	S359	5.50
42JO 5G	5		S319	6.00
42RO 5000S	5000	3.0	S357	6.00

HI-VOLTAGE RELAYS

20KV

Pioneer 5TA-75 High Volt. Relay.
Coil: 26VDC, 110 ohm. Contacts:
vacuum switch: RF: to 20KV max.
DC: 1.5 amp. to 5KV overall dim.:
4-1/2 x 2-1/8 x 5-1/8.



\$16⁹⁵

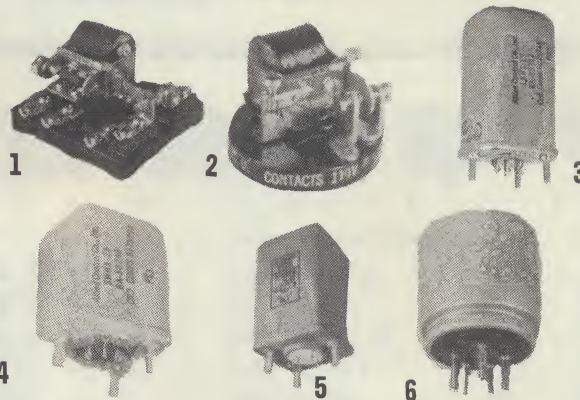
3KV

Allied 1R1-4 Coil: 24VDC, 165 ohm.
Contacts SPST (1X) @ 3000 VDC.



\$5⁹⁵

PLATE CIRCUIT RELAYS



Mfr. & No.	Circ.	Volts	Ohms	Fig.	Stock No.	Price
Allied BX32	1C		50	1	KP273	\$1.50
Allied KS5862	1B		50	2	KP200	1.50
Allied LKHx-69	2C	7 ma. DC	2500	3	H363	3.00
Allied SWHX-25	1C	7 ma. DC	4000	4	H318	3.00
C.P. Clare SN42006	1A,2B	6 ma. DC	6500	4	H364	3.00
Comar C3944	1C	6 ma. DC	3500	5	H395	3.00
G.E. CR2791G 103C25	1C		2500	6	S300	3.00

WESTON SENSITROL RELAYS #723

- Twin Contact
- Electric Reset
- Accuracy 15%



Range	Scale	Reset	Price
Low Hi		Coil	
80-120 ua	80-120 ua	110VAC	\$39.50
85-1.2 ma	80-120 % VDC	130VDC	12.50 *

*RFE

3" round meter, mounts in 2 3/4" dia. hole.

CONTACT NOMENCLATURE

A Make SPSTNO	G Break, break	U Double make, contact on arm
B Break SPSTNC	H Break, break, make	V Double break, contact on arm
C Break, make (transfer) SPDT	Make, break, make	W Double make, double break, contact on arm
D Make, break (continuity transfer)	J Make, break make,	X Double make SPSTNODS
E Break, make break	K Single Pole, double throw, center off SPDTNO	Y Double break SPSTNCDB
F Make, make	L Break, make make	Z Double make, double break SPDTDB

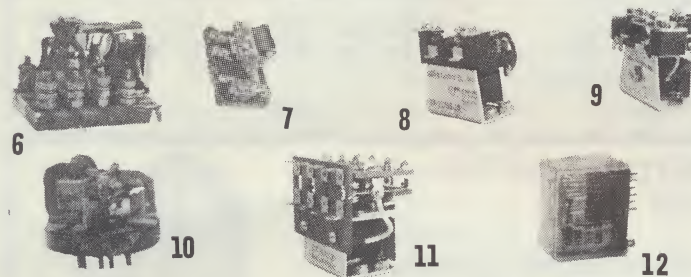
KEYING RELAYS

ADVANCE



Advance	Circ.	Amps.	Volts	Ohms	Fig.	Stock No.	Price
1103-16-1	2A	15	26.5VDC	160	1	KP225	\$2.00
1404	2C		12VDC	250	2	KP207	1.50
1604	2C		10 ma., DC	2500	2	KP138	1.50
1605	2A		1.8VDC	7.5	2	KP206	1.50
2826-1Y	2A	30	60VDC	1500	3	KP211	1.50
9813A	4C	5	24VDC	270	4	KP164	2.00
601S-1538	1A	1.5	24VDC	250	2	KP208	1.25
MG2A110VD	2A	2	110VDC	8K	2	KP209	1.50
PC2C24VD	2C	15	24VDC	230	5	KP210	2.00

ALLIED



Advance	Circ.	Amps.	Volts	Ohms	Fig.	Stock No.	Price
BJBX1	2C	5	24VDC	250	6	KP185	\$1.50
BO6A	2C	15	115VAC	445	7	KP125	3.00
BO6A	2C	15	220VAC	1700	7	KP224	3.50
BOX32	1X	15	24VDC	77	7	KP166	1.50
BOX48	1X	15	28VDC	230		KP400	1.50
BOX92	1C, 1B	15	30VDC	230	7	KP274	1.50
BOX94	2C	15	24VDC	230	7	KP142	1.50
BX32	1C		1VDC	50	8	KP273	3.50
CNA13D	1X	50	6VDC	10.8	9	KP167	3.00
CNA13D	1X	50	26.5VDC	175	9	KP188	2.50
CNAS13A	1X	50	115VAC	145	9	KP124	3.50
KS5862	1B		3VDC	50	10	KP200	3.00
POX108	3C	15	27.5VDC	300	11	KP145	2.00
T154X-190	6C	2	24VDC	480	12	KP233	3.50

GE

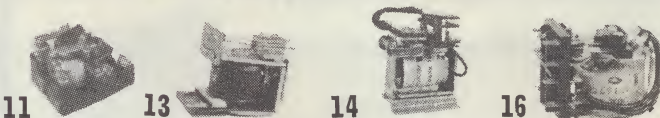


GM



G.E.	Circ.	Amps.	Volts	Ohms	Stock No.	Price
CR2791-B109P36	2Z	5	110VDC	10K	KP250	1.25
G.M.	Circ.	Amps.	Volts	Ohms	Stock No.	Price
13011-2	1A	2	27.5VDC	5000	KP139	\$1.50

GUARDIAN



Guardian	Circ.	Amps.	Volts	Ohms	Fig.	Stock No.	Price
215	1U	8	1VDC	.5	13	KP334	\$1.00
215*	2A	8	24VDC	275	13	KP337	1.00
345	3C	12	24VDC	162	14	KP179	1.50
610	1A	1.5	1.5VAC	.7	13	KP302	1.00
1200	2A	5	115VAC		11	KP234	1.50
1215	3C	8	115VDC	4075	16	KP304	1.50
2210	2A	25	115VAC		11	KP100	3.25

*Mounted on bakelite board

LEACH



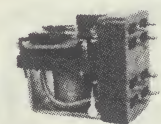
Leach	Circ.	Amps.	Volts	Ohms	Fig.	Stock No.	Price
237-38B	2C		12VDC	59	18	KP212	\$1.50
1015	1C	2	24VDC	375	19	KP267	1.50
1021	1X	5	60VDC	2250	20	KP213	1.50
1120	1D		115VAC		21	KP110	2.50
1220DE	1X	12	24VDC	95	22	KP137	1.50
1221V	2X	12	24VDC	160	23	KP141	1.75
1257	1W	15	24VDC	250	24	KP214	1.50
1257AC	1W	15	115VAC		24	KP107	3.00
1352BF	1Y	15	115VAC		24	KP109	3.00
1357	2C	15	115VAC		24	KP108	3.00
9067-97D	3C	15	24VDC	160	25	KP144	2.00

OHMITE

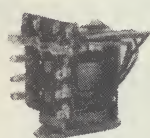


Advance	Circ.	Amps.	Volts	Ohms	Fig.	Stock No.	Price
DOSX162	2C	15	24VAC		76	KP266	\$2.50
DOSX319	1A, 1B	15	115VAC		75	KP215	2.25
DOSX350	1C	15	115VAC		75	KP216	2.25
DOSX351	1A, 1C	15	115VAC		75	KP217	2.50
DOSX290	2A	15	115VAC		75	KP218	2.50
DOSX263	2C	15	115VAC		75	KP217	3.50
DOSX274	2C	15	230VAC		76	KP221	3.50
DOX130T	4C	10	230VAC		76	KP223	4.50
DOX261	4C	10	230VAC		76	KP222	4.50
DOX264	4C	10	230VAC		76	KP226	4.50
DOSEPX13	2C	15	110VDC	5K	77	KP229	3.50
DOSEPX32	2C	15	110VDC	3070	77	KP228	3.50
DOSEPX7	2C	15	230VAC		77	KP227	3.50

POTTER & BRUMFIELD



28



29



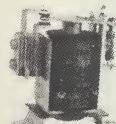
31



32



33



34



35



36



37

P & B	Circ.	Amps.	Volts	Fig.	Stock No.	Price
AB11A	2C	10	24VAC	28	KP154	\$3.00
AB1076	2A	10	230VAC	28	KP159	3.00
KCP5	1C	5	5 ma DC/.25K	31	KP232	4.00
KHP17D11	4C	3	6VDC	32	KP114	2.50
KHP17D11	4C	3	12VDC	32	KP115	2.50
KHP17D11	4C	3	24VDC	32	KP116	2.50
KL17D	4C	5	24VDC/600	29	KP122	4.00
KR5A	1C	5	115VAC	33	KP277	2.50
KR11A	2C	5	6VAC	33	KP119	2.50
KR1479-2	2C	5	12VDC	33	KP170	1.50
KRP1A	1A	5	115VAC	31	KP369	3.00
KRP2D	1B	5	24VDC	31	KP368	2.00
KRP5A	1C	5	115VAC	31	KP236	3.50
KRP11A	2C	5	115VAC	31	KP237	4.50
KRS11	2C	5	12VDC	33	KP175	1.50
LM5	1C	8	3.2ma./10K	34	KP173	2.00
LM1149	2C	8	28VDC	34	KP193	2.00
LM1635	2C	8	2 ma./15K	34	KP194	2.00
LMRS16-J	2C	5	24VDC	34	KP195	2.00
MR5D	1C	5	6VDC	35	KP172	2.50
MR14A	3C	8	230VAC	36	KP160	3.00
PR3A	1X	25	115VAC	37	KP308	3.00
PR3D	1X	25	12VDC	37	KP171	3.00
PR7AY	2A	25	115VAC	37	KP101	3.50

RBM

38



41

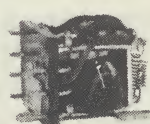


RBM	Circ.	Amps.	Volts	Ohms	Fig.	Stock No.	Price
83713	2C	10	24VDC	300	38	KP204	\$1.50
83723	2C	10	50VDC	1500	38	KP176	1.50
94523	2C	10	115VAC		38	KP271	3.00
75-250301-2510	2A	25	115VAC		41	KP205	3.00

STRUTHERS DUNN



43



44



45



46

Struthers Dunn	Circ.	Amps.	Volts	Ohms	Fig.	Stock No.	Price
8CXX159	3A	30	115VAC			KP118	\$6.00
61XXH100	1Y	20	24VDC	50	43	KP140	1.50
119XB144	2C	5	115VAC		44	KP191	2.50
A218HXX100	1X	10	24VDC	125	45	KP169	1.50
CXA2139	2C	4	24VDC	16	46	KP262	1.50

WARD LEONARD



40



47



48

Ward Leonard	Circ.	Amps.	Volts	Fig.	Stock No.	Price
105-4410	1A	20	24VDC	47	KP266	\$1.50
105-5401	1A	20	115VAC	47	KP371	2.50
106-5420	2A	1	32VDC	48	KP136	2.00
106-6124	1X	20	115VAC	48	KP306	3.00
106-6515	1X	20	115VAC	48	KP307	3.00
105-6520	2A	20	115VAC	40	KP502	3.50

WHEELOCK

49



50



Wheelock	Circ.	Amps.	Volts	Fig.	Stock No.	Price
140-2G	2C	20	90VDC	49	KP501	\$3.50
RX-1103	2A	5	115VAC	50	KP500	2.00

MISCELLANEOUS



81

Miscellaneous	Circ.	Amps.	Volts	Fig.	Stock No.	Price
Decohm L218714	2C	5	110VDC 5K	80	KP237	\$2.00
Sigma 42RPZ	2C	5	110VAC/2500	81	KP238	3.00

RELAYS IN STOCK BY MFR.'s NO.

For direct replacement relays consult listing below. Write or phone for prices on items which cannot be located in catalog.

ADLAKE

MW-2617-12U
MW4620-11U
MW4620-801-1

ADVANCE

AN3304-1
A7946-2
A8744-1A
A8911-14
A9-1
B8963-1
C8779-1
GHE3C
H87121
LE2C115VA
MG2A110VD
MM2C26.5VD-S1A
MV7002
PC2C24VD
TC6D110-A3
THZC110VD-S3A
TQ4C27VD-S7B
1103-16-1
1404
16015-1538
1604
1605
2826-1Y
607745-1
9813

AEMCO

R95-2029
117-2747
95-2029

AGASTAT

DEB-22T
DEY-22AT
ND-11
ND-12
ND-21
NE-11
NE-12
NE-21
NE-22
SFA-22SG
SFC-22HSSC
2112-A-5M
2112-D-H1
2112-D-H2
2112-DH3
2122-D-H1
2122-D-5

ALLIED

BJBX-1
BJX-37
BO6A
BOHRX-86
BOHX-72
BOX-92
BOX-94
BOYHX-15
BX-32
CN-13D
CNA-13D
CNAS-13A
CNASH-13A
IRI-4
KHJX-113

ALLIED (cont.)

KHX-5
KHX-10
KHX-11
KHX-31
KHX-44
KHX-131
KHYX-79
KHYX-106
KHYX-126
KHYX-145
KS-5862-L02
LKHX-69
MH-6D
MH-18D
MHB-6D
MHB-12D
MHB-18D
MHB-18D
MHB-18D
MHJ-18D
MHJT-18D
MHJX-4020
MHJX-4024A
MHJX-4034
MHJX-4048
MHJX-6019
MHJX-6034
MHJX-6070
MHK-12D
MHUO-12D
MHX-12C
MHX-23
MHX-27
MHX-57
MHX-58
MHX-61
MHX-65
MHX-88
MHX-120
MHX-126
MHX-175
MHX-179
MHX-197-A
MHX-239
MHX-244
MHX-2018
MHX-2032
MHX-2051
MHX-2136
MHX-2165
MHX-2201
MHX-2231
MHX-4014
MHX-4016
MHX-4104
MHX-4108
MHX-4126
MHX-6009
MHX-6015
MHX-6021
MHX-6083
MHX-6128
MHYX-4021
PBHX-1
PO-9D
POH-15-15
POX-18
POX-26
POX-132
POX-166
RSHX-27
RSHX-60
RSHX-64
RSHX-91
SKH-CC-CC
SKHX-3A

ALLIED (cont.)

SKHX-49
SKHX-153
SKHX-462
SKHX-750
STKX-100
SWHX-25
SWHX-35
T154-C-C
T154X-190
2Z7658-13

AMERICAN

U72649J

AMERICAN MONARCH

11843

AMPERITE

26NC60T-NC-265-60S
26NO30
115N030-NO-115-30S
115N030T-NO-115-30S
115N060-NO-115-60S
115N0120T
115N0150

AUTOMATIC ELECTRIC

H-87725-1

BABCOCK

BR8H-500C2-6.7-20

BARBER COLMAN

AYLZH-3316-P
AYLZH-4614S
AYLZ-2542-P
AYLZ-3104-P
AYLZ-3105-S
AYLZ-5369-S

CLARE

B30256
HG-1001
HG-1002
HG-1004
HG-1010
HG-1017
HG-1019
HG-1023
HG-1040
HG-1076
HG-1077
HG2A-1002
HG2A-1003
HG2A-1015
HG2A-1029
HG2A-1030
HG3A-1004
HG4A-1020
HG4A-1026
HG4A-1037
HG4AU-1008
HG4B-1020B
HG6F-1003
HG6F-1011
HG6F-1022
HG6F-1028
HGP-1012
HGP-1036
HGP-1139

CLARE (cont.)

HGSM-1061
HGSS-1001
HGS-1012
HGS-5128
HG2AU-1004
RP10316G1
RP11522G1
RP3098-G1
RP3716G9
RP3716G11
RP3716G12
RP3716G21
RP3716G125
RP3731-G131
RP5771-G2
RP7630-G32
RP7975G5
RP9896-G2
RP9896-G9
RP9896-G42
SC-6003
SG-8003
SJ-29003
SK-44052
SK-44070
SN-40001
SN-42006

COMAR

C-3849
C-3863
C-3944
C-4065
C-6273

CONTINENTAL ELECTRONICS

2115
CONTROL DYNAMICS
C8.5ES4L4KL

COUCH

X136
X147
X171
X190
X206
X208
X362

CRAMER CONTROLS

430H

CUTLER-HAMMER

6041H25A
6041H43C
6041H143AB-5B
6042H24
6042H32
6141H80
6141H127
6141H129
6141H133
6141H136
6141H137
9565H-8B

DECOHM

DA4048
DA4063
D1301-3A4-58J
L21-8714T

DELTRONICS

DC-36F-7

DIAPHLEX

666-836

EDISON

B1569
B1624
B1626-NO-26.5-300S
B2011
B2017
B2020-NO-26.5-5-300S
B2109-NO-26.5-210S
B2133

ELECTRO-TEC

1000-9
MARK II

ELGIN

MK2C24VDS10A
MV2C-600D-13
MV2C-600D14
MV2C-600D-16
MV2C-5000-D-13
MV7263
MV7359
5635-500
7115-513
8110-300
8110-345
8320-345

ESSEX

1128-1400

FEDERAL TEL. & RADIO CO.

NL81781-1
K1304

FILTORS

L26A18
LL26AAK6
LL26AAK12
LL26AAK12F
LL26AAK12N
LL26J6
LL26R18
LL26R18F
M26FC6A
M26FC6SL
P26A1H6A
P26AF1H6A-1
P26B5H6A
P32B17J6A6.1
S28A1H6A
T26SB6Z

FILTORS (cont.)

T26SB18Z
T26SK18S7
T26SK18Z
TM26FC6SB
V26RB12A
8SC6A
14SM12SA
26S6SA12A
26S6SB18E
26SC12
26SE18S
26SEC18A
26SF18S
26SFP6
26SLB12A
26SM12F
26SM12R
26SM12SF
26SM18SA
26SP12
26SP18
26SRC12B
26SY12

FXR

300-10018

G. E.

CR2791-B106J3
CR2791-B109C3
CR2791-B109P36
CR2791-C103C25
CR2791-C103C32
3SAH111182
3S2791G200AF9
3S2791G200AH9VA
3S2791G200BA9EE
3S2791G200H9
3S2791G200V9
3S2791G203A1SW
3S2791G210A7
3S2791G210E1D
3S2791G210N9EE
3S2791G277DK39J
3S2791G300M20LM
12PAC11B24

G.M.

13011-2
13016

GUARDIAN

A410-060977-00
A410-061470
G10474
G28180
G32953
G36458
G50458
G53973
G54329A
G57070
G59102
L500
2210
500-24-A2
610
670-G-115
670-175-2C